WONDER Stories Quarterly

WINTER 1932

A GERNSBACK PUBLICATION

HUGO GERNSBACK, Editor

"The Moon Destroyers"
by Monroe K. Ruch

Other Interplanetary Stories
By

A. ROWLEY HILLIARD
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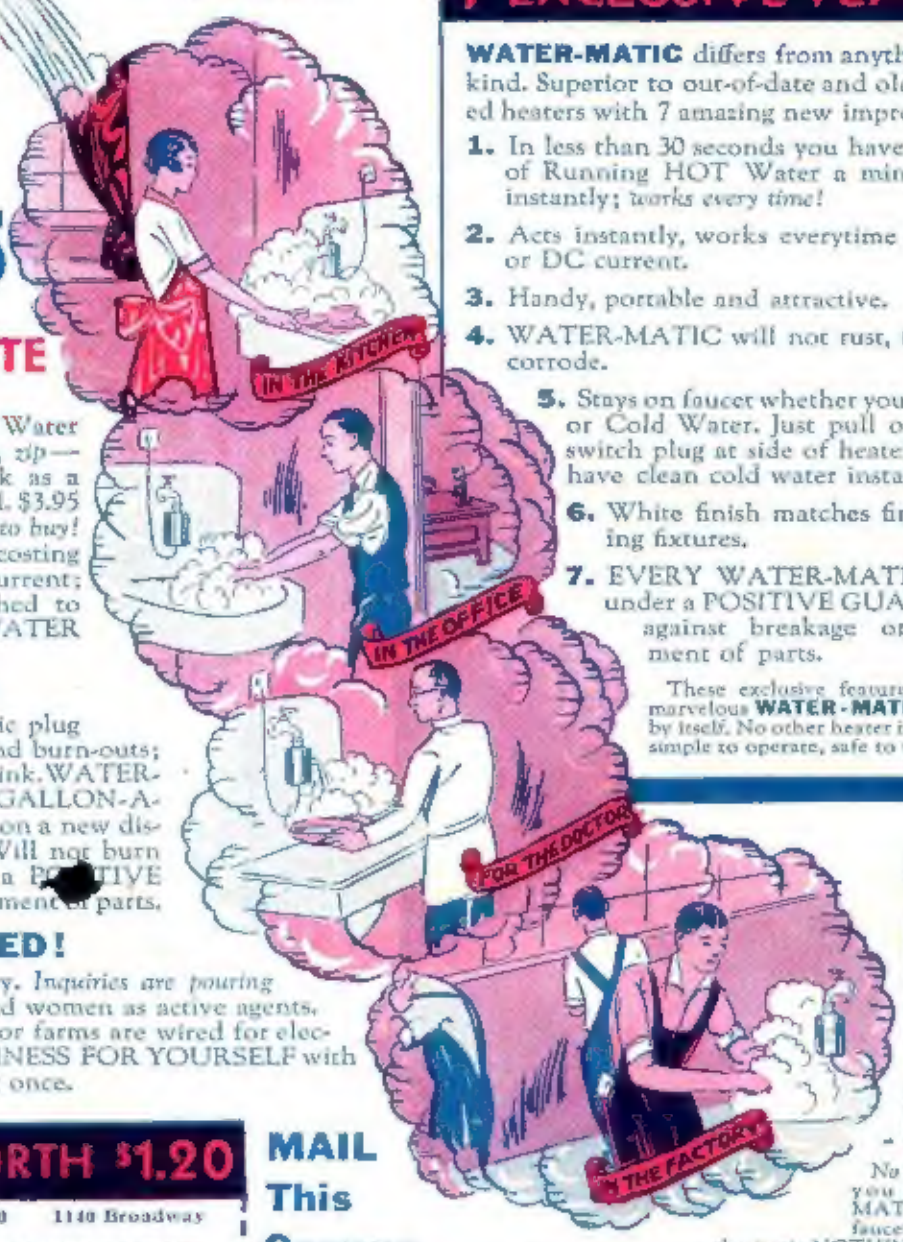

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Published by
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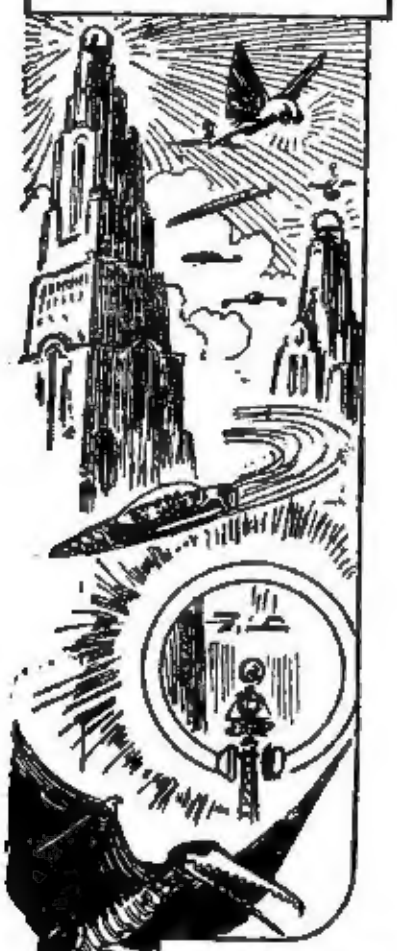
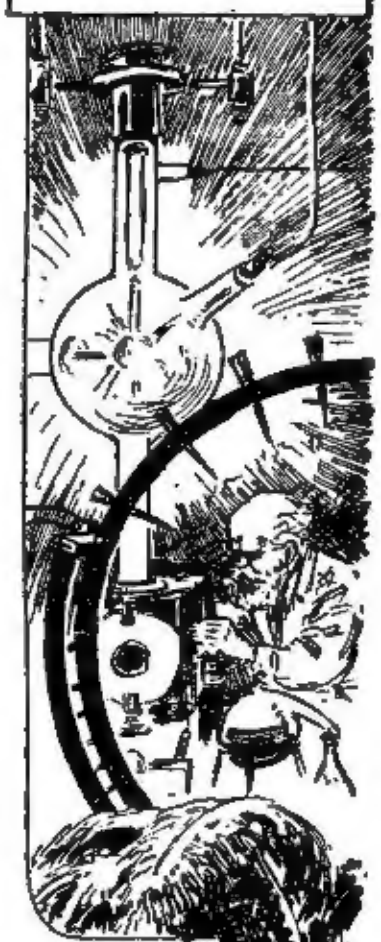
Vol. 3
No. 2

Winter
1932





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OUR COVER ILLUSTRATION

from Monroe K. Ruch's "The Moon Destroyers" shows the three ships from earth accomplishing slowly the gigantic task of disintegrating the moon, so that the earth might be freed forever of its fearfully destructive effect upon the earth's crust.

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WONDER STORIES QUARTERLY is for sale at principal newsstands in the United States and Canada. Printed in U. S. A.
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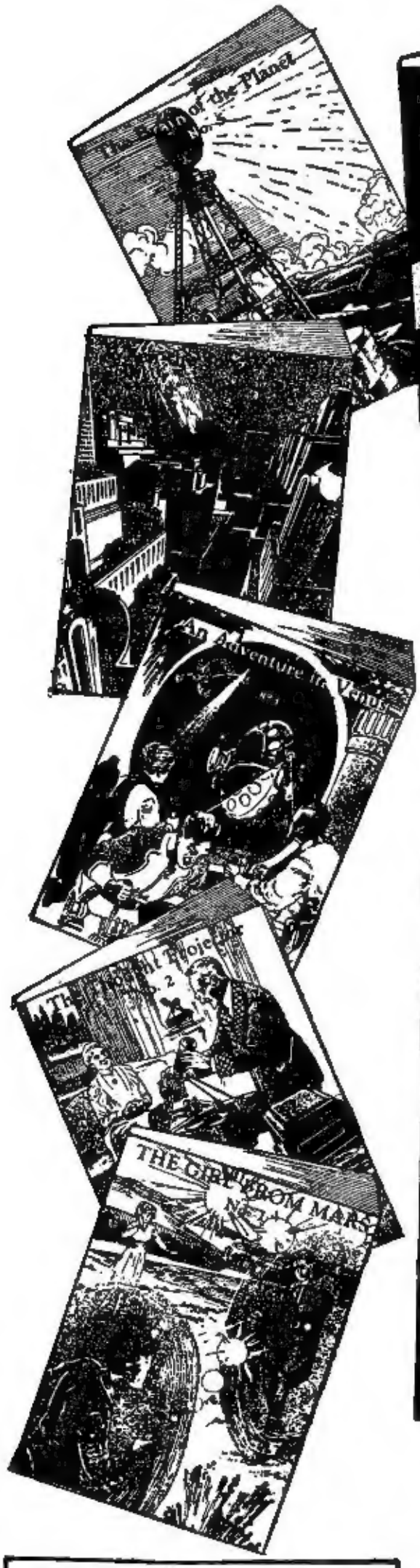

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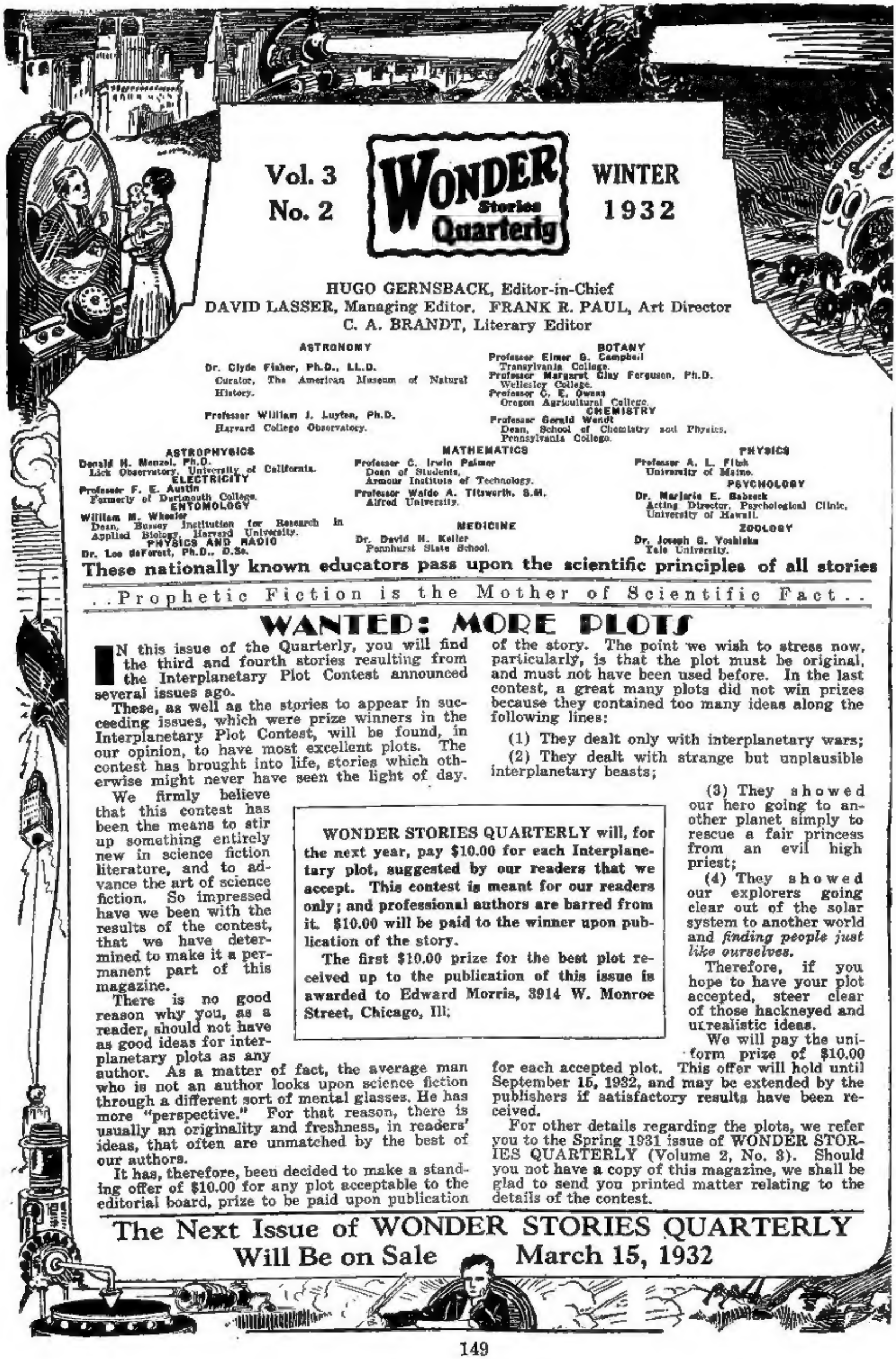

Vol. 3
No. 2

WONDER Stories Quarterly

WINTER
1932

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WANTED: MORE PLOTS

IN this issue of the Quarterly, you will find the third and fourth stories resulting from the Interplanetary Plot Contest announced several issues ago.

These, as well as the stories to appear in succeeding issues, which were prize winners in the Interplanetary Plot Contest, will be found, in our opinion, to have most excellent plots. The contest has brought into life, stories which otherwise might never have seen the light of day.

We firmly believe that this contest has been the means to stir up something entirely new in science fiction literature, and to advance the art of science fiction. So impressed have we been with the results of the contest, that we have determined to make it a permanent part of this magazine.

There is no good reason why you, as a reader, should not have as good ideas for interplanetary plots as any author. As a matter of fact, the average man who is not an author looks upon science fiction through a different sort of mental glasses. He has more "perspective." For that reason, there is usually an originality and freshness, in readers' ideas, that often are unmatched by the best of our authors.

It has, therefore, been decided to make a standing offer of $10.00 for any plot acceptable to the editorial board, prize to be paid upon publication of the story. The point we wish to stress now, particularly, is that the plot must be original, and must not have been used before. In the last contest, a great many plots did not win prizes because they contained too many ideas along the following lines:

(1) They dealt only with interplanetary wars;

(2) They dealt with strange but unplausible interplanetary beasts;

(3) They showed our hero going to another planet simply to rescue a fair princess from an evil high priest;

(4) They showed our explorers going clear out of the solar system to another world and *finding people just like ourselves.*

Therefore, if you hope to have your plot accepted, steer clear of those hackneyed and unrealistic ideas.

We will pay the uniform prize of $10.00 for each accepted plot. This offer will hold until September 15, 1932, and may be extended by the publishers if satisfactory results have been received.

For other details regarding the plots, we refer you to the Spring 1931 issue of WONDER STORIES QUARTERLY (Volume 2, No. 3). Should you not have a copy of this magazine, we shall be glad to send you printed matter relating to the details of the contest.

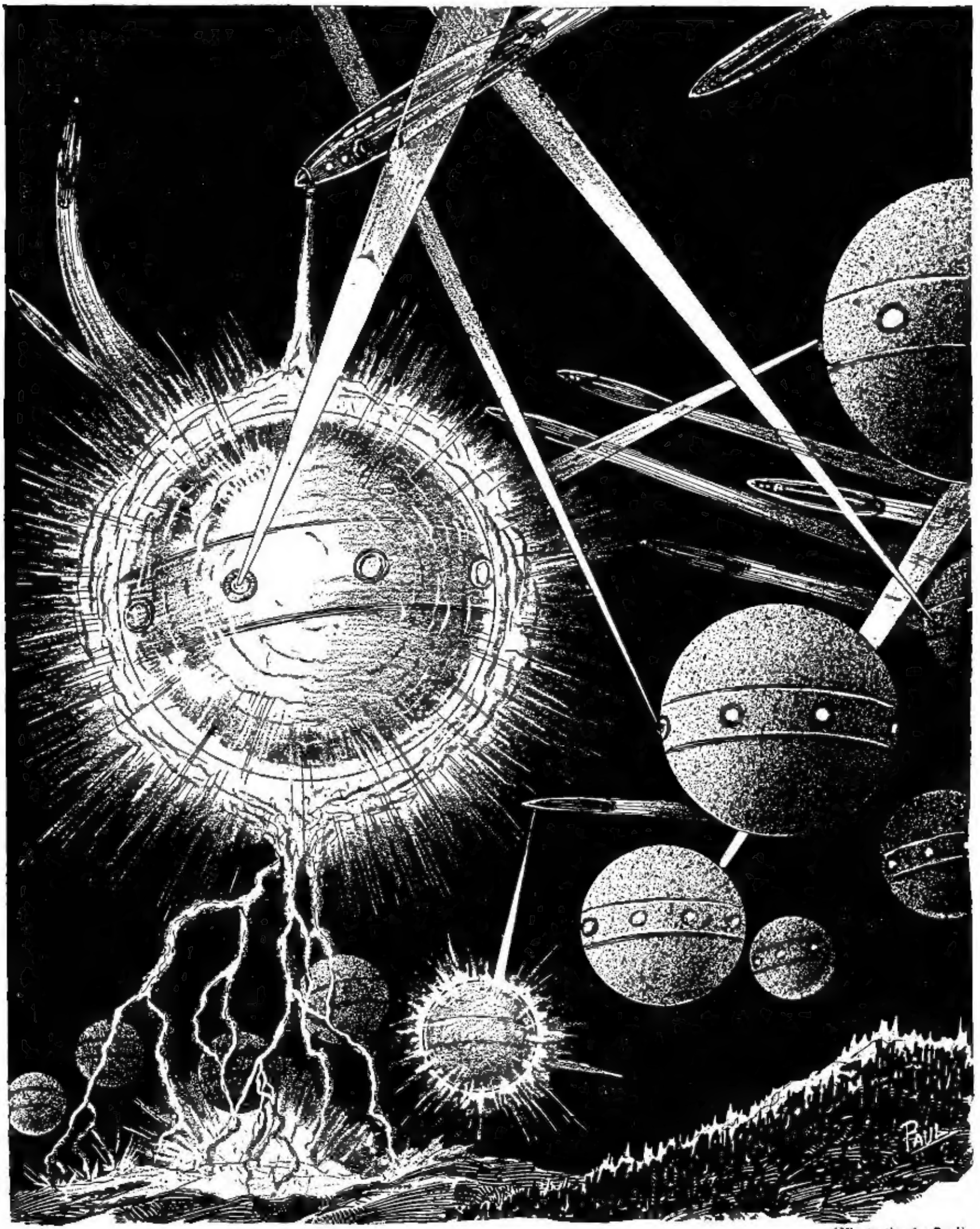
WONDER STORIES QUARTERLY will, for the next year, pay $10.00 for each Interplanetary plot, suggested by our readers that we accept. This contest is meant for our readers only; and professional authors are barred from it. $10.00 will be paid to the winner upon publication of the story.

The first $10.00 prize for the best plot received up to the publication of this issue is awarded to Edward Morris, 3914 W. Monroe Street, Chicago, Ill.

The Next Issue of WONDER STORIES QUARTERLY Will Be on Sale March 15, 1932

The Onslaught from Rigel

By FLETCHER PRATT



(Illustration by Paul)

A jagged beam of flame, intenser than the hottest furnace leaped through the air, struck the green globe and reached the earth in a thousand tiny rivulets of light.

THE ONSLAUGHT FROM RIGEL

By the author of "The Reign of the Ray," "The War of the Giants," etc.

MURRAY LEE woke abruptly, with the memory of the sound that had roused him drumming at the back of his head, though his conscious mind had been beyond its ambit. His first sensation was an overpowering stiffness in every muscle—a feeling as though he had been pounded all over, though his memory supplied no clue to the reason for such a sensation.

Painfully, he turned over in bed and felt the left elbow where the ache seemed to center. He received the most tremendous shock of his life. The motion was attended by a creaking clang and the elbow felt exceedingly like a complex wheel.

He sat up to make sure he was awake, tossing the offending arm free of the covers. The motion produced another clang and the arm revealed itself to his astonished gaze as a system of metal bands, bound at the elbow by the mechanism he had felt before, and crowned, where the fingers should be, by steely talons terminating in rubber-like finger-tips. Yet there seemed to be no lack of feeling in the member. For a few seconds he stared, open-mouthed, then lifted the other arm. It was the right-hand counterpart of the device he had been gazing at. He essayed to move one, then the other—the shining fingers obeyed his thought as though they were flesh and blood.

A sense of expectant fear gripped him as he lifted one of the hands to unbutton his pajamas. He was not deceived in the half-formed expectation; where the ribs clothed in a respectable amount of muscle should have been, a row of glistening metal plates appeared. Thoughts of body-snatching and bizarre surgery flitted through his mind to be instantly dismissed. Dreaming? Drunk? A dreadful idea that he might be insane struck him and he leaped from the bed to confront a mirror. His feet struck the floor with a portentious bang and each step produced a squeak and clank—and he faced the mirror, the familiar mirror before which he had shaved for years. With utter stupefaction he saw an iron countenance, above which a stiff brush of wire hair projected ludicrously.

One does not go mad at such moments. The shock takes time to sink in. "At all events I may as well get dressed," he remarked to himself practically. "I don't suppose water will do this hardware any good, so I'll omit the bath; but if I'm crazy I might as well go out and have a good time about it."

Dressing was a process prolonged by an examination of himself and the discovery that he was a most efficient metal machine. He rather admired the smoothness of the hip joints and the way the sliding parts of his arms fitted together, and was agreeably surprised to find that in the metallizing process his toes had become prehensile. Just for the fun of it, he pulled one shoe on with the opposite foot.

It was not until he was nearly dressed that he realized that the wonted noise of New York, which reached one as a throaty undertone at the forty-eighth story of a modern apartment building, was somehow absent. Surely, at this hour—he glanced at the clock. It had stopped at a quarter to two. No help there. His watch was inexplicably missing. Probably Ben had borrowed it . . . Ah!

That was the idea. Ben Ruby, with whom he occupied the duplex apartment in the penthouse of the Arbuckle Building, was a scientist of sorts (mainly engaged in the analysis of "booze" samples for millionaires distrustful of their bootleggers, these days)—he would be able to explain everything.

He stepped across to the door and dropped the brass knocker, a little timorous at the sound of his own thudding steps. The door was snatched open with unexpected suddenness by a caricature of Ben in metal—as complete a machine as himself, but without most of the clothes.

"Come in! Come in!" his friend bellowed in a voice with an oddly phonographic quality to it. "You look great. Iron Man MacGinnity! What did you put on

FLETCHER PRATT

MR. PRATT is well known for his "Reign of the Ray," and "The War of the Giants" where in both stories he showed his excellent knowledge of warfare, and what a future war might be like.

In this story he combines that knowledge with a vivid and fertile scientific imagination to construct an interplanetary story that marks a new triumph for WONDER STORIES QUARTERLY.

We know that many scientists believe that life may originally have come to earth in the form of spores, from other solar systems and other universes. We therefore might really have had our home dim ages ago, on worlds distantly removed from our earth.

The ability to travel the interstellar spaces, however, might also be possessed by other creatures—creatures driven by fear, necessity and by the will to conquer. And if they come, in mighty waves, with scientific powers far beyond us, to dominate the earth, a terrible time will face the puny human race.

And in this story they do come, and provoke some of the strangest and most exciting adventures that have yet been recorded.

clothes for? As useful as pants on a rock-drill. I have breakfast."

"What is it? Am I crazy, are you, or are we both?"

"Of course not. Greatest thing that ever happened. The big comet. They said she was radioactive, but most of 'em wouldn't believe it. Now look what it did." (Murray Lee remembered vaguely some newspaper palaver about a giant comet that was going to strike the earth—argument and counter-argument as to whether it would have a serious effect.) "Everybody's turned to metal; nize machinery, ate oop all de axle-grease. You need oil. Stick around."

He disappeared into the bowels of the apartment, the sound of his footsteps ringing enormous in the vast silence. In an instant he was back with a radio battery in one hand and an oil-can in the other.

"Sorry, no grease on tap," he remarked briskly. "Typewriter oil." He went to work busily, squirting drops of oil into Lee's new metallic joints. "Connect this thing up yourself. It fills you with what it takes." He indicated the battery with an extended toe. "One arm and the opposite leg. There seems to be a resistance chamber in us somewhere that collects the juice."

Without in the least understanding what it was all about, Murray Lee made shift to follow his instruction. It was the most singular meal he had ever partaken of, but he found it curiously invigorating.

"How about another? No? Have you seen anybody else? It finished most of them."

"Will you sit down and tell me consecutively what it's all about before I bash you?" asked Murray, petulantly. "Being turned into a machine is not the easiest thing in the world on one's temper; it upsets the disposition."

"Some sort of a special extra radioactive gas storm connected with the comet, I think, though I can't be sure. It's made machines of all of us, now and forever more. We'll live on electric current after this and won't have to bother about little things like doctors if we can find a good mechanic. But it killed a lot of people. Come along, I'll show you."

HIS hand rang on Murray's arm as he grasped it to lead the way. The hall was portentously dark, and Ben pulled him straight across it to the door marked "Fire Exit."

"Elevator?" queried Murray.

"No go. No power."

"Oh, Lord, forty-eight stories to walk."

"You'll get used to it." They were clanking to the landing of the floor below and Ben, without the slightest compunction, pushed boldly into the door of the apartment there. The lock showed signs of being forced. "Oh, I broke it in," Ben answered Murray's unspoken query. "Thought I might be able to help, but it was no use. That fat woman lives here—you know, the one that used to sniff at us in the elevator when we went on a bender."

Any qualms Murray felt about looking on the naked face of death were perfunctorily laid to rest as the scientist led him into the room occupied by the late lady of the elevator. She lay solidly in her bed amidst the meretricious gorgeousness she had affected in life, the weight of her body sagging the bed grotesquely toward its center. Instead of the clean-running mechanical devices which marked the appearance of the two friends, she was nothing but lumps and bumps, a bulging, ugly cast-iron statue, distending the cheap "silk" nightdress.

"See?" said Ben, calmly. "The transmutation wasn't complete. Prob'ly didn't get it as strong as we did. Look, the window's closed. This will be a warning to people who are afraid to sleep in a draft. Come along."

Murray lingered. "Isn't there anything . . . we can do?" He felt uncomfortably responsible.

"Not a thing," said Ben, cheerfully. "All she's good for is to stand in the park and look at. Come along. We've got a lot of stairs to go down . . . we're too noisy; need a good bath in non-rusting oil."

They reached the street level after an æon of stairs, Ben leading the way to the corner drug store. All about them was a complete silence; fleecy white clouds sailed across the little ribbon of blue visible at the top of the canyon of the New York city street.

"Lucky it's a nice day," said Ben, boldly stepping into the drug store, the door of which stood open. "We'll have to figure out this rainy weather thing. It's going to present a problem."

Within, the drug store presented the same phenomena of arrested development as the apartment of the fat lady at the forty-seventh story. A cast-iron statue of a soda-clerk leaned on the fountain in an attitude of studied negligence, its lips parted as though addressing some words to the equally metallic figure of a girl which faced him across the counter. On her steely features was a film of power, and the caked and curling remains of her lip stick showed she had been there for some time.

"By the way," Murray asked, "have you any idea what day it is, and how long we were—under the influence? It couldn't have happened overnight."

"Why not?" came Ben's voice from the rear of the store. "Say, old dear, rummage around some of those drawers for rubber gloves, will you? I'd hate to run into high voltage with this outfit."

"Ah, here they are," came from Ben finally. "Well, let's go."

"What's the next step?" They were outside.

"Rubber shoes, I fancy," said Ben, as his feet skidded on the pavement. "Let's take a taxi there and go find a shoe store."

Together they managed to slide the cast-iron taxi driver from his seat (Murray was surprised at how easily he was able to lift a weight he could not have budged in his flesh and blood days), deposited him on the curb and climbed in. The key was fortunately in the switch.

As they swung around the corner into Madison Avenue, Lee gave an exclamation. A scene of ruin and desolation met their eyes. Two or three street cars had telescoped and an auto or so had piled into the wreckage. All about were the iron forms of the passengers in these conveyances, frozen in the various attitudes they had assumed at the moment of the change, and from one or two of them thin streamers of metal showed where blood had flowed forth before it had been irretrievably crystallized to metal.

Murray Lee suddenly realized that an enormous amount of machinery had gone to smash everywhere when the guiding hands had been removed and the guiding brains frozen to useless metal. He gave a little shudder.

THEY swung round before a shoe store with grating brakes. The door was locked, but Ben, lifting his foot, calmly kicked a hole in the show window. Murray extended a restraining hand, but his friend shook it off.

"No use asking permission. If the proprietor of this place is still alive anywhere, it will be easy enough to settle up for the damage; if he isn't, we have as good a right to it as anybody."

The new toes, which appeared to be longer than those he remembered, made fitting a difficulty, and Murray split two or three shoes before he got a pair on.

"What next?" he asked. "I feel like a drink."

"No use," said Ben. "You're on the wagon for good. Alcohol would play merry hell with your metalwork. The best thing is to find out how many people we are. For all we know, we're the only ones in the world. This thing seems to have knocked out everybody along the street level. Let's try some of the taller apartment buildings and see if we can find more penthouse dwellers."

"Or maybe the others came to before us and went away," offered Murray.

"True," Ben replied. "Anyhow, look-see." He led the way to the taxi.

"Wait," said Murray. "What's that?"

Above the sound of the starting engine came the echo of heavy footsteps, muffled by shoes.

"Hey! Coo-ee! This way!" shouted Ben. The footsteps tentatively approached the corner. Murray ran forward, then stopped in amazement. The newcomer was a girl—or would have been a girl had she not been all metal and machinery like themselves. To his eyes, still working on flesh-and-blood standards, she was anything but good-looking. She was fully and formally dressed, save that she wore no hat—the high pile of tangled wire that crowned her head made this obviously impossible.

"Oh, what *has* happened?" she cried at them. "What can I do? I took a drink of water and it hurt."

"Everything's all right. Just a little metal transformation," said Ben. "Stick around, I'll get you some oil. You squeak." He was off down the street in a clatter, leaving Murray with the newcomer.

"Permit me to introduce myself," he offered. "I am —or was—Murray Lee. My friend, who has gone to get you some oil, is Benjamin Franklin Ruby. He thinks the big comet which hit the earth contained radioactive gas that made us all into metal. Did you live in a penthouse?"

She eyed him darkly. "Somebody told you," she said, "I'm Gloria Rutherford, and we have the top floor of the Sherry-Netherland, but all the rest were away when this happened . . . Oh, pardon me, it hurts me to talk."

There came a crash from down the street, indicating that Ben was forcing another store, and in a minute he was back with a handful of bottles. With a flourish he offered one to the girl. "Only castor, but it's the best the market affords," he said. "What we need is a good garage, but there aren't many around here . . . Go ahead, drink her down, it's all right," he assured the girl, who was contemplating the bottle in her hand with an expression of distaste.

Following his own recommendation, he tipped up one of the bottles and drank a deep draught, then calmly proceeded to douse himself from head to foot with the remainder.

She made a little grimace, then tried it. "Thank you," she said, setting the bottle down. "I didn't think it was possible anybody could like the stuff except in a magazine ad. Now tell me, where are all the other people and what do we do?"

"Do?" queried Ben. "Find 'em. How? Ask Mr. Foster. Anybody else in your neck of the woods?"

She shook her head. Murray noticed that the joints of her neck rattled. "Paulson—that's my maid—was the only other person in our apartment, and she seems to be even more solid-iron in the head than usual—like this lot." She swung her hand round in an expressive gesture toward the image of a policeman which was directing two similar images to pause at the curb.

"How about a bonfire?" suggested Murray. "That's the way the Indians or South Africans or somebody, attract attention."

"What could we burn?" asked Ben. ". . . A building, of course. Why not? Property doesn't mean anything any more with all the property owners dead."

"I know," said Gloria Rutherford, falling into the spirit of his suggestion. "The old Metropolitan Opera. That eyesore has worried me for the last five years."

The suggestion was endorsed with enthusiasm. They climbed into the taxi and twenty minutes later were hilariously kindling a blaze in the back-stage section of the old building, running out of it with childish delight to watch the pillar of smoke grow and spread as the flames caught the timbers, long dry with age.

Murray sighed as they sat on the curb across the street. "This is the only time I've ever been as close as I wanted to be to a big fire," he complained, "and now there isn't even a policeman around for me to make faces at. But such is life!"

"What if it sets fire to the whole city?" inquired Gloria practically.

Ben shrugged. "What if?" he replied. "Doesn't mean anything. Bet there aren't more than a couple of dozen people alive. But I don't think it will. Modern construction in most of these places is too fireproof."

"Look, there's a bird," said Gloria, indicating a solid metal sparrow, fixed, like the human inhabitants of the city, in his last position in life at the edge of the curb. "By the way, what do we eat? Do we live on castor oil all the time?"

CHAPTER II

A Metal Community

THE conversation turned into a discussion of the possibilities of their new form. Whether they would need sleep was a moot point, and they were discussing the advisability of training mechanics as doctors when the first footsteps announced themselves.

They belonged to a man whose face, ornamented by a neat Van Dyke in wire, gave him the appearance of a physician of the more fleshly life, but who turned out to be a lawyer, named Roberts. He was delighted with the extraordinary youthfulness and vitality he felt in the new incarnation. Fully dressed in morning clothes, he bore the information that he was one of a group of four who had achieved the metal transformation atop the French building. He promptly plunged into a discussion of technicalities with Ben that left the other two out of it, and they moved off to the Seventh Avenue side of the building to see whether any more people were visible.

"Do you miss the people much?" asked Murray, by way of making conversation.

"Not a bit," she confessed. "My chief emotion is delight over not having to go to the de la Poers' tea tomorrow afternoon. Though I suppose we will miss them as time goes on."

"I don't know about that," Murray replied. "Life was getting pretty complicated and artificial—at least for me. There were so many things one had to do before one began living—you know, picking the proper friends and all that."

The girl nodded understandingly. "I know what you mean. My mother would throw a fit if she knew I were here talking to you right now. If I met you at a dance in Westchester it would be perfectly all right for me to stay out with you half the night and drink gin together, but meeting you in daylight on the street—oh, boy!"

"Well," Murray sighed, "that tripe is all through with now. What do you say we get back and see how the rest are getting along?"

They found them still in the midst of their argument.

"—evidently some substance so volatile that the mere

contact with animal tissue causes a reaction that leaves nothing of either the element or the tissue," Ben was saying. "You note that these metal bands reproduce the muscles almost perfectly."

"Yes," the lawyer replied, "but they are too flexible to be any metal I know. I'm willing to grant your wider knowledge of chemistry, but it doesn't seem reasonable. All I can think of is that some outside agency has interfered. These joints, for instance—," he touched Ben's elbow, "—and what about the little rubber pads on your fingers and toes and the end of your nose?"

There was a universal motion on the part of the others to feel of their noses. It was as the lawyer had said—they were, like the fingers and toes, certainly very much like rubber—and movable!

"Don't know," said Ben. "Who did it, though? That's what boggles your scheme. Everybody's changed to metal and nobody left to make the changes you mention. However, let's go get the rest of your folks. I wonder if we ought to have weapons. You two wait here."

He clanked off with the lawyer to the taxi. A moment later, the tooting of the horn announced their return. The party consisted, beside Roberts himself, of his daughter, Ola Mae, a girl of sixteen, petulant over the fact that her high-heeled shoes were already breaking down under her weight; a Japanese servant named Yoshio; and Mrs. Roberts, one of those tall and billowy women of the earlier life who, to the irritation of the men, turned out to be the strongest of any of them. Fat, apparently, had no metallic equivalent, and her ample proportions now consisted of bands of metal that made her extraordinarily powerful.

With these additions the little group adjourned to Times Square to watch the billowing clouds of smoke rising above the ruins of the opera house.

"What next?" asked Gloria, seating herself on the curbstone.

"Look for more people," said Murray. "Surely we can't be the only frogs in the puddle."

"Why not?" put in Ben, argumentatively, with a swing of his arm toward the wreckage-strewn square. "You forget that this catastrophe has probably wiped out all the animal life of the world, and we seven owe our survival to some fortunate chance."

The Japanese touched him on the arm. "Perhaps sir can inform inquirer, in such case, what is curious avian object?" he said, pointing upward.

They heard the beat of wings as he spoke and looked up together to see, soaring fifty feet past their heads a strange parody of a bird, with four distinct wings, a long feathered tail, and bright intelligent eyes set in a dome-like head.

There was a moment of excited babbling.

"What is it?"

"Never saw anything like it before."

"Did the comet do *that* to chickens?" And then, as the strange creature disappeared among the forest of spires to the east, the voice of the lawyer, used to such tumults, asserted its mastery over the rest.

"I think," he said, "that whatever that bird is, the first thing to be done is find a headquarters of some kind and establish a mode of life."

"How about finding more people?" asked Gloria. "The more the merrier—and there may be some who don't know how nice castor oil is." She smiled a metallic smile.

"The fire—" began Ben.

"It would keep some people away."

THEY debated the point for several minutes, finally deciding that since those present had all come from the top floors or penthouses of tall buildings, the search should be confined to such localities. Each was to take a car—there were any number for the taking around Times Square—and cover a certain section of the city, rallying at sundown to the Times building, where Ola Mae and Murray, who could not drive, were to be left.

Roberts was the first one back, swinging a big Peugeot around with the skill of a racing driver. He had found no one, but had a curious tale. In the upper floors of the New Waldorf three of the big windows were smashed in, and in one corner of the room, amid a maze of chairs fantastically torn as though by a playful giant, a pile of soft cloths. In the midst of this pile, four big eggs reposed. He had picked up one of the eggs, and after weighing the advisability of bringing it with him, decided he had more important things to do. The owners of the nest did not appear.

As he emerged from the building, however, the quick motion of a shadow across the street caused him to look up in time to catch a glimpse of one of the four-winged birds they had seen before, and just as he was driving the car away, his ears were assailed by a torrent of screeches and "skrawks" from the homecomer. He did not look up until the shadow fell across him again when he perceived the bird was following close behind him, flying low, and apparently debating the advisability of attacking him.

Roberts waved his arms and shouted; it had not the slightest effect on the bird, which, now that it was closer, he perceived to move its hind wings only, holding its fore-wings out like those of an airplane. He wished he had a weapon of some kind; lacking one, he drew the car up to the curb and ran into a building. The bird alighted outside and began to peck the door in, but by the time it got through Roberts had climbed a maze of stairs, and though he could hear it screaming throatily behind him, it did not find him and eventually gave up the search.

The end of this remarkable tale was delivered to an enlarged audience. Gloria had arrived, bringing a chubby little man who announced himself as F. W. Stevens.

"The boy plunger?" queried Murray absent-mindedly, and realized from Gloria's gasp that he had said the wrong thing.

"Well, I operate in Wall Street," Stevens replied rather stiffly.

Ben came with three recruits. At the sight of the first, Murray gasped. Even in the metal caricature, he had no difficulty in recognizing the high, bald forehead, the thin jaws and the tooth-brush moustache of Walter Beeville, the greatest living naturalist. Before dark the others were back—Yoshio with one new acquisition and Mrs. Roberts, whose energy paralleled her strength, with no less than four, among them an elaborately gowned woman who proved to be Marta Lami, the Hungarian dancer who had been the sensation of New York at the time of the catastrophe.

They gathered in the Times Square drug store in a strange babble of phonographic voices and clang of metal parts against the stone floor and soda fountains. It was Roberts who secured a position behind one of these erstwhile dispensers of liquid soothing-syrup and rapped for order.

"I think the first thing to be done," he said, when the voices had grown quiet in answer to his appeal, "is to organize the group of people here and search for more. If it had not been for the kindness of Mr. Ruby here, my family and I would not have known about the

necessity of using oil on this new mechanical makeup nor of the value of electrical current as food. There may be others in the city in the same state. What is the—ah—sense of the gathering on this topic?"

Stevens was the first to speak. "It's more important to organize and elect a president," he said briefly.

"A very good idea," commented Roberts.

"Well, then," said Stevens, ponderously, "I move we proceed to elect officers and form as a corporation."

"Second the motion," said Murray almost automatically.

"Pardon me." It was the voice of Beeville the naturalist. "I don't think we ought to adopt any formal organization yet. It hardly seems necessary. We are practically in the golden age, with all the resources of an immense city at the disposal of—fourteen people. And we know very little about ourselves. All the medical and biological science of the world must be discarded and built up again. At this very moment we may be suffering from the lack of something that is absolutely necessary to our existence—though I admit I cannot imagine what it could be. I think the first thing to do is to investigate our possibilities and establish the science of mechanical medicine. As to the rest of our details of existence, they don't matter much at present."

A murmur of approval went round the room and Stevens looked somewhat put out.

"We could hardly adopt anarchy as a form of government," he offered.

"Oh, yes we could," said Marta Lami, "Hurray for anarchy. The Red Flag forever. Free love, free beer, no work!"

"Yes," said Gloria, "what's the use of all this metallizing, anyway? We got rid of a lot of old applesauce about restrictions and here you want to tie us up again. More and better anarchy!"

"SAY," came a deep and raucous voice from one of the newcomers. "Why don't we have just a straw boss for a while till we see how things work out? If anyone gets fresh the straw boss can jump him, or kick him out, but those that stick with the gang have to listen to him. How's that?"

"Fine," said Ben, heartily. "You mean have a kind of Mussolini for a while?"

"That's the idea. You ought to be it."

There was a clanging round of metallic applause as three of four people clapped their hands.

"There is a motion—" began Roberts.

"Oh, tie a can to it," said Gloria, irreverently, "I nominate Ben Ruby as dictator of the colony of New York for—three months. Everybody that's for it, stick up your hands."

Eleven hands went up. Gloria looked around at those who remained recalcitrant and concentrated her gaze on Stevens. "Won't you join us, Mr. Stevens?" she asked sweetly.

"I don't think this is the way to do things," said the Wall Street man with a touch of asperity. "It's altogether irregular and no permanent good can result from it. However, I will act with the rest."

"And you, Yoshio?"

"I am uncertain that permission is granted to this miserable worm to vote."

"Certainly. We're all starting from scratch. Who else is there? What about you, Mr. Lee?"

"Oh, I know him too well."

The rest of the opposition dissolved in laughter and Ben made his way to the place by the counter vacated by Roberts.

"The first thing we can do is have some light," he ordered. "Does anyone know where candles can be had around here? I suppose there ought to be some in the drug store across the street, but I don't know where and there's no light to look by."

"How about flashlights? There's an electrical and radio store up the block."

"Fine, Murray you go look. Now Miss Roberts, will you be our secretary? I think the first thing to do is to get down the name and occupation of everyone here. That will give us a start toward finding out what we can do. Ready? Now you, Miss Rutherford, first."

"My name is Gloria Rutherford and I can't do anything but play tennis, drink gin and drive a car."

The rest of the replies followed: "F. W. Stevens, Wall Street," "Theodore Roberts, lawyer," "Archibald Tholfsen, chess-player," "H. M. Dangerfield, editor," "Francis X. O'Hara, trucking business," (this was the loud-voiced man who had cut the Gordian knot of the argument about organization). "Are you a mechanic, too?" asked Ben.

"Well, not a first class one, but I know a little about machinery."

"Good, you're appointed our doctor."

"Paul Farrelly, publisher," "Albert F. Massey, artist"—the voices droned on in the uncertain illumination of the flashlights.

"Very well, then," said Ben at the conclusion of the list. "The first thing I'll do is appoint Walter Beeville director of research. Fact number one for him is that we aren't going to need much of any sleep. I don't feel the need of it at all, and I don't seem to see any signs among you. O'Hara will help him on the mechanical side. . . . I suggest that as Mr. Beeville will need to observe all of us we make the Rockefeller Institute our headquarters. He will have the apparatus there to carry on his work. Let's go."

CHAPTER III

Rebellion

THEY whirled away to the east side of the city and up Second Avenue like a triumphal cortege, blissfully disregarding the dead traffic lights, though now and then they had to dodge the ruins of some truck or taxi that had come out second best from an argument with an elevated pillar where the driver's hand had been frozen at the wheel. At Forty-ninth Street Ben's car, in the lead, swung in to the curb and pulled up.

"What is it?" . . . "Is this the place?" . . . "Anything wrong?"

An illuminating voice floated up. "Electric store, get all the flashlights and batteries you can. We're going to need them."

A few moments later they were at the great institution, strangely dark and silent now after all its years of ministering to the sick, with a line of rust showing redly on the tall iron fence that surrounded the grounds. They trooped into the reception room, flickering their lights here and there like fireflies. Ben mounted a chair.

"Just a minute, folks," he began. "I want to say something. . . . What we have to do here is build civilization up all over again. Undoubtedly there are more people alive—if not in New York, then in other places. We have two jobs—to get in touch with them and to find out what we can do. Mr. Beeville is going to find out about the second one for us, but we can do a lot without waiting for him.

"In the first place, there's that funny-looking bird that we all saw and that chased Roberts. There may be others like it and a lot of new queer forms of animal life around that would be dangerous to us. Therefore,

I think it's in line to get some weapons. Miss Lami, you and Mr. Tholfsen are delegated to dig up a hardware store and find guns and cartridges. . . . Now for the rest, I'm open to suggestions."

Everybody spoke at once. "Wait a minute," said Ben. "Let's take things in order. What was your idea, Mr. Stevens?"

"Organize regular search parties."

"And a good idea, too. We don't even need to wait for daylight. Everybody who can drive, get a car and trot along."

"X-ray machines are going to be awfully useful in my work," offered Beeville. "I wonder if there isn't some way of getting enough current to run one."

"As far as I remember, this building supplies its own current. Murray, you and Massey trot down and get a fire up under one of the boilers. Anything else?"

"Yes," came from Dangerfield, the editor. "It seems to me that the first thing anyone else in the world would try to do if he found himself made into a tin doll like this is get hold of a radio. How about opening up a broadcasting station?"

"I don't know whether you can get enough power, but you can try. Go to it. Do you know anything about radio?"

"A little."

"All right. Pick whoever you want for an assistant and try it out. Any more ideas?"

"What day is it?" asked Ola Mae Roberts.

Nobody had thought of it, and it suddenly dawned on the assemblage that the last thing they remembered was when the snow on the roof-tops bespoke a chilly February, while now all the trees were in leaf and the air was redolent of spring.

"Why—I don't know," said Ben. "Anybody here got any ideas on how to find out?"

"It would take an experienced astronomer and some calculation to determine with accuracy," said Beeville. "We'd better set an arbitrary date."

"O. K. Then it's May 1, 1947. That's two years ahead of time, but it will take that long to find out what it really is."

The assumption that sleep would be unnecessary proved correct. All night long, cars roared up to the door and away again on their quests. The number of people found was small—the cream had apparently been gathered that morning. O'Hara brought in a metallic scrubwoman from one of the downtown buildings, the tines that represented her teeth showing stains of rust where she had incautiously drunk water; Stevens turned up with a slow-voiced young man who proved to be Georgios Pappagourdas, the attaché of the Greek consulate whose name had been in the papers in connection with a sensational divorce case; and Mrs. Roberts came in with two men, one of them J. Sterling Vanderschoof, president of the steamship lines which bore his name.

At dawn Dangerfield came in. He had set up a powerful receiving set by means of storage batteries but could find no messages on the air, and could find no source of power sufficient for him to broadcast.

The morning, therefore, saw another and somewhat less optimistic conference. As it was breaking up Ben said, "You Tholfsen, take Stevens, Vanderschoof and Lee and get a truck, will you? You'll find one about half a block down the street. Go up to one of the coal pits and get some fuel for our boilers here. We haven't too large a supply."

There was a clanking of feet as they left and Ben turned into the laboratory where Beeville was working, with the scrubwoman as a subject.

"Something interesting here," said the naturalist, looking up as he entered. "The outer surface of this metal appears to be rust-proof, but when you get water on the inside, things seem to go. It acts like a specially annealed compound of some kind. And look—" He seized one of the arms of his subject, who gazed at him with mildly unresisting eyes, and yanked at the outer layer of metal bands that composed it. The band stretched like one of rubber, and she gave a slight squeal as it snapped back into position. "I don't know of any metal that has that flexibility. Do you? Why—"

THE door swung open and they turned to see Murray and Tholfsen.

"Beg pardon for interrupting the sacred panjandrum," said the former, "but Stevens and Vanderschoof are indulging in a sulk. They don't want to play with us."

"Oh, hell," remarked Ben cheerfully and started for the door, the other two following him.

He found the recalcitrants soon enough. The Wall Street man was seated across a doctor's desk from Vanderschoof and looked up calmly from an interrupted conversation as Ben entered.

"Thought I asked you two to go with the boys for some coal," said Ben, waving at them. "My mistake. I meant to."

"You did. I'm not going."

Ben's eyes narrowed. "Why not?"

"This is the United States of America, young man. I don't recognize that I am under your orders or anyone else's. If you think you are going to get us to accept any such Mussolini dictatorship, you've got another guess coming. As I was saying—" he turned back to Vanderschoof with elaborate unconcern, and Murray took a step toward him, bristling angrily.

"Leave me alone, boys, I can handle this," said Ben, waving the other two back. "Mr. Stevens." The broker looked up with insolent politeness. "This is not the United States, but the colony of New York. Conditions have changed and the sooner you recognize that the better for all of us. We are trying to rebuild civilization from the ruins; if you don't share in the work, you shall not share in the benefits."

"And what are you going to do about it?"

"Put you out."

There was a quick flash, and Ben was staring into the business end of a Luger automatic, gripped tightly in the broker's hand. "Oh, no you won't. You forget that you made this anarchy yourself when you refused to have a president. Now get out of here, quick, and let me talk with my friend."

For a moment the air was heavy with tension. Then Vanderschoof smiled—a superior smile. Stevens' eyes blinked, and in that blink Ben charged, and as he moved, Murray and Tholfsen followed. There was a report like a clap of thunder in the narrow room, a tremendous ringing clang as the bullet struck the metal plate of Ben's shoulder and caromed to the ceiling, whirling him around against the desk and to the floor by the force of the impact. Murray leaped across his prostrate body, striking at the gun and knocking it down just in time to send the second shot wild; Tholfsen stumbled and fell across Ben.

Ben was up first, diving for Murray and Stevens, now locked in close grapple, but the chess-player's action was more effective. From his prone position he reached up, grabbed Stevens' legs and pulled them from under him, bringing him down with a crash, just as Ben's added weight made the struggle hopelessly one-sided. In a moment more the dictator of the New York colony was sitting on his subject's chest while Murray held his

arms. Vanderschoof, with the instinctive terror of the man of finance for physical violence, sat cowering in his chair.

"Get—some wire," gasped Ben. "Don't think—cloth will hold him."

Tholfsen released his hold on the legs and climbed to his feet. "Watch the other one, Murray," said Ben, his quick eye detecting a movement toward the gun on Vanderschoof's part.

"Now you, listen," he addressed the man beneath him. "We could tie you up and lay you away to pickle until you died for the lack of whatever you need, or we could turn you over to Beeville to cut up as a specimen, and by God," glaring with a kind of suppressed fury, "I wouldn't hesitate to do it! You're jeopardizing the safety of the whole community."

The grim face beneath him showed neither fear nor contrition. He hesitated a moment.

"If I let you go and give you a car and a couple of batteries, will you promise to clear out and never come back?"

Stevens laughed shortly. "Do you think you can bluff me? No."

"All right, Tholfsen, get his feet first," said Ben, as the chess-player reappeared with a length of light-cord he had wrenched from somewhere. The feet kicked energetically, but the task was accomplished and the arms secured likewise. "You watch him," said Ben, "while I get a car around."

"What are you going to do?" asked Vanderschoof, speaking for the first time since the scuffle.

"Throw him in the river!" declared Ben, with ruthless emphasis. "Let him get out of that." Stevens took this statement with a calm smile that showed not the slightest trace of strain.

"But you can't do that," protested the steamship man. "It's—it's inhuman."

"Bring him outside boys," said Ben, without deigning to reply to this protest, and clanged out to the car.

They lifted the helpless man into the back seat, and with a man on either side of him, started for Queensboro Bridge. The journey was accomplished in a dead silence.

HALFWAY down the span, Ben brought the taxi round with a flourish and climbed out, the other two lifting Stevens between them. Murray looked toward his friend, half expecting him to relent at the last moment, but he motioned them wordlessly on, and they set down their burden at the rail.

"Over with him!" said Ben remorselessly. They bent . . .

"I give up," said Stevens in a strangely husky voice. Murray and Tholfsen paused.

"Did you hear what I said?" said Ben. "Over with him!"

They heaved. "Stop!" screamed the broker. "For God's sake, I'll give up. I'll go. Oh-h-h!" The last was a scream, as Ben laid a detaining hand on Murray's arm.

"Let him down, boys," he said quietly. "Now listen, Stevens. I don't want to be hard on you—but we've got to have unanimity. You're done. Take a car and clear out. If I let you go now, will you promise to stay away?"

"Yes," said the Wall Street man. "Anything, only for God's sake don't do that!"

"All right," said Ben.

As they were loading the banker in the car for the return trip a thought struck Murray. "By the way, Ben," he remarked, "didn't he nick you with that gun?"

"That's right," said Ben, "he did." And gazed down at the long bright scratch in the heavy metal that covered his shoulder joint. It was uninjured.

CHAPTER IV

Flight!

BUT when Tholfsen and Murray returned with the coal, Vanderschoof was missing as well as Stevens, and that evening when the car in which Marta Lami had accompanied Roberts on the exploration of the Brooklyn Heights district drew up at the Institute, it had only one occupant.

"What happened to Miss Lami?" asked Ben.

Roberts gazed at him, surprised. "Didn't you send them? While we were at the St. George Hotel a car came along with Stevens and two of those new men in it. One was the Greek. They spoke to her for a minute and she said they brought a message from you that she was to go with them."

"M-hm," said Ben. "I see. Well, as long as they don't come back, it's all right."

. . . . . .

The car whirled out the Albany Post Road in a silence that was indicative of the rivalry that had already sprung up between Stevens and Vanderschoof. As for Pappagourdas he found himself demoted to the position of a "yes man."

They had provided themselves with a liberal supply of guns and ammunition, and with the foolish conservatism of the very rich, refusing to believe that money was valueless, had raided store after store until they had acquired a considerable supply of currency.

"This is the Bear Mountain Bridge, isn't it?" said the dancer. "Let's stop at West Point and pick up a cadet. They're so ornamental."

Stevens glanced at her sourly from the wheel. "We've got to hurry if we want to get to Albany," he said.

"Still," offered Vanderschoof protectingly, "why not stop at the Point? We might find some people there. I know Colonel Grayson. Played golf with him there last summer. Ha, ha! When I holed out an eighteen-footer at the seventh, he was so mad, he wouldn't speak to me all the rest of the afternoon. It was the turning point of the battle. Ha, ha!"

Stevens, with a grunt, swung the wheel round and began the ascent of the long bridge ramp. He realized he had been outmaneuvered. To cover his retreat, he remarked, "Isn't that a bird?"

"The high muck-a-muck said something about birds last night," said the dancer, "but he's such a Holy Joe that I didn't pay any attention."

"Aren't the birds all dead?" asked the Greek, respectfully. "I saw some in the gutter outside my window and they were turned to iron."

THE car coughed to the rise, made it and slid across the bridge.

"It is a bird," said the dancer, "and what a bird! Papa, look at the ostrich."

Pappagourdas and Vanderschoof followed her pointing finger. Along its direction they saw, a couple of hundred feet behind and above them, the widespread wings and heavy body of the same type of four-winged bird Roberts had encountered. Vanderschoof tugged at his pocket. "Maybe it'll come close enough to give us a shot," he said hopefully.

The bird was certainly gaining on them, though the speedometer of the car had risen beyond forty miles an hour. As it drew nearer, they could make out the high-domed, most un-birdlike head set with pop-eyes fixed in a permanent expression of astonishment, the short

bill, slightly hooked at the tip, and the huge expanse of the wings. It seemed to be inspecting them as a smaller avian might inspect a bug crawling across a road.

As it drew nearer, it swooped to within a couple dozen feet of the car; they noticed that its feet, folded back beneath the body had a metallic luster. Then Vanderschoof fired, with a bang that almost deafened the rest. The bird seemed surprised rather than frightened or resentful. At the sound of the gun it bounded upward a few feet and then swung again, moving along parallel with the car and twisting its neck to take a good look at the passengers. The chance was too good to be missed; both Pappagourdas and Vanderschoof fired this time, steadying themselves against the motion of the car. One of the shots evidently went home, for a couple of feathers floated down, and the bird, with a series of ear-piercing squawks, spiralled down the side of the mountain toward the river-bank, three or four hundred feet below.

"Bull's eye!" yelled Pappagourdas. "Gimme the cigar! Let's stop the car and go get it."

"What's the use," said Stevens, "you couldn't eat it, anyway. Listen to him yell, would you?"

Above the sound of the motor the screeching of the wounded bird still reached them faintly from the bottom of the cliff.

"I think it's a damn shame to shoot up the poor thing," said Marta Lami.

"Oh, he'll be all right," declared Vanderschoof. "Don't believe we touched anything but one wing, and it'll just sit and eat ground-berries till it gets well."

It was perhaps half an hour later, and the distant hills were beginning to acquire a fine powder of dusk when they saw the second bird—a rapidly moving speck, far behind them and to one side of the road. Vanderschoof saw it first and called the attention of the rest, but they quickly lost interest.

He continued to observe it. Were there two? He thought so, yet—. A moment later he was sure there was more than one, as the car breasted a rise and gave them a better view. They seemed to be following fast. The ridiculous idea that they meant to do something about their fallen comrade came to him, to be dismissed instantly. Yet the birds were certainly following them and he thought he made out a third, behind the others.

The car coasted down a long slope, crossed a bridge and began to go up a hairpin rise. Vanderschoof looked back. The birds were invisible; he looked again, in the right direction this time and saw them, so much larger and nearer that he cried out. The others ceased their low-voiced conversation at the sound of his voice. "What's the matter, papa?" asked the dancer.

"Those birds. Look."

"Why it looks almost as though they were following us."

She sat upright in the seat and squinted at them under an upraised hand. The queer birds were close enough now so that the difference between their forewings and the steadily beating hind wings could be made out.

"You don't suppose they could be mad at us?" she asked.

"Don't be foolish," said Stevens, without turning around. "Birds aren't intelligent enough for that." A long straight stretch lay before him and he let the car out. Vanderschoof, watching with a trace of anxiety, saw the birds also put on more speed. "They are following us," he declared with conviction.

"Look," said Marta Lami, "that one is carrying something, too."

As she spoke, the bird, flying high, gained a position just above and ahead of the car, dropped the object and instantly wheeled off and down to one side. There was a heavy thud on the road ahead, and a big rock bounded and rolled a score of feet before the car.

Marta Lami screamed. Vanderschoof swore, with feeling. "Get out your guns and drive them off," said Stevens. "You fools, why did you have to shoot at them in the first place?"

Before he had finished speaking Vanderschoof had his revolver out and was firing at the second of the birds, now swinging into position above them with another rock. He missed, but the bird, surprised, dropped its burden too soon, and they had the satisfaction of seeing it bounce among the trees at the right of the road.

"Keep after them, that's right," said Stevens. "We're not far from the Point and we can get under cover there."

BOTH the men in the back were shooting now—Vanderschoof slowly and with deliberate aim; Pappagourdas in a panic-stricken rafale at the third bird, which, higher than the others, paid not the slightest attention to them but jockeyed for position. Stevens began to twist the steering wheel—the car described a fantastic series of zigzags.

"What are they?" he asked. "I never saw anything like them."

"I don't know," replied Vanderschoof. (Bang!) "Like the condors (Bang!) I used to see in South America, only bigger."

Crash! The third rock burst in a shower of fragments not ten feet away, one piece striking the windshield with a ping, and sending a long diagonal crack across it. The first of the three birds was swinging up again with another rock, screeching hoarse communications at the others.

Marta Lami had fallen silent. As the bird began to circle above them, picking its position, Pappagourdas suddenly ceased firing, with a curse. "Have you got any more bullets?" he asked. "Mine are all gone. . . ." His voice broke suddenly, half-hysterical, "It is the cranes of Ibicos," he cried.

The stone struck behind them. Evidently the bird had a healthy respect for Vanderschoof's aim, which had kept it at such a height that it could not aim accurately. But as the next stone missed they changed their tactics, screaming to each other. The third bird, whose turn it was to drop a stone, merely flew along parallel with them, high enough to be out of range, waiting for the return of the others. When they arrived, all three strung out in a line and released their rocks simultaneously. There was a resounding crash, the car reeled perilously on the edge of the steep road, then righted and drove on with a clattering bang. Looking over the side Vanderschoof could see where the big rock had struck the right running board, tearing a foot or two of it loose to trail on the road.

"Wait," he cried, but Stevens shook his head.

They had a bit of luck at this point. The hunt for more stones or something of the kind delayed their enemies, and when they next saw the birds winging up behind them, the white classical lines of the West Point administration building already loomed ahead, clear in the gathering gloom.

Stevens turned in, swung the car around at the door, and halted it with screaming brakes, just as the first of the birds overhead overshot the mark and turned to come back. In an instant the banker was out of the car, dragging at Marta Lami's hand. Vanderschoof climbed numbly out the other side, and ran around the

car toward the door of the building, but the Greek missed his footing where the running board should have been and fell prone, just as one of the birds dived down with a yell of triumph and dropped his stone accurately onto the struggling man.

"Run!" shouted Stevens.

"But—the Greek," panted Vanderschoof as they climbed the steps.

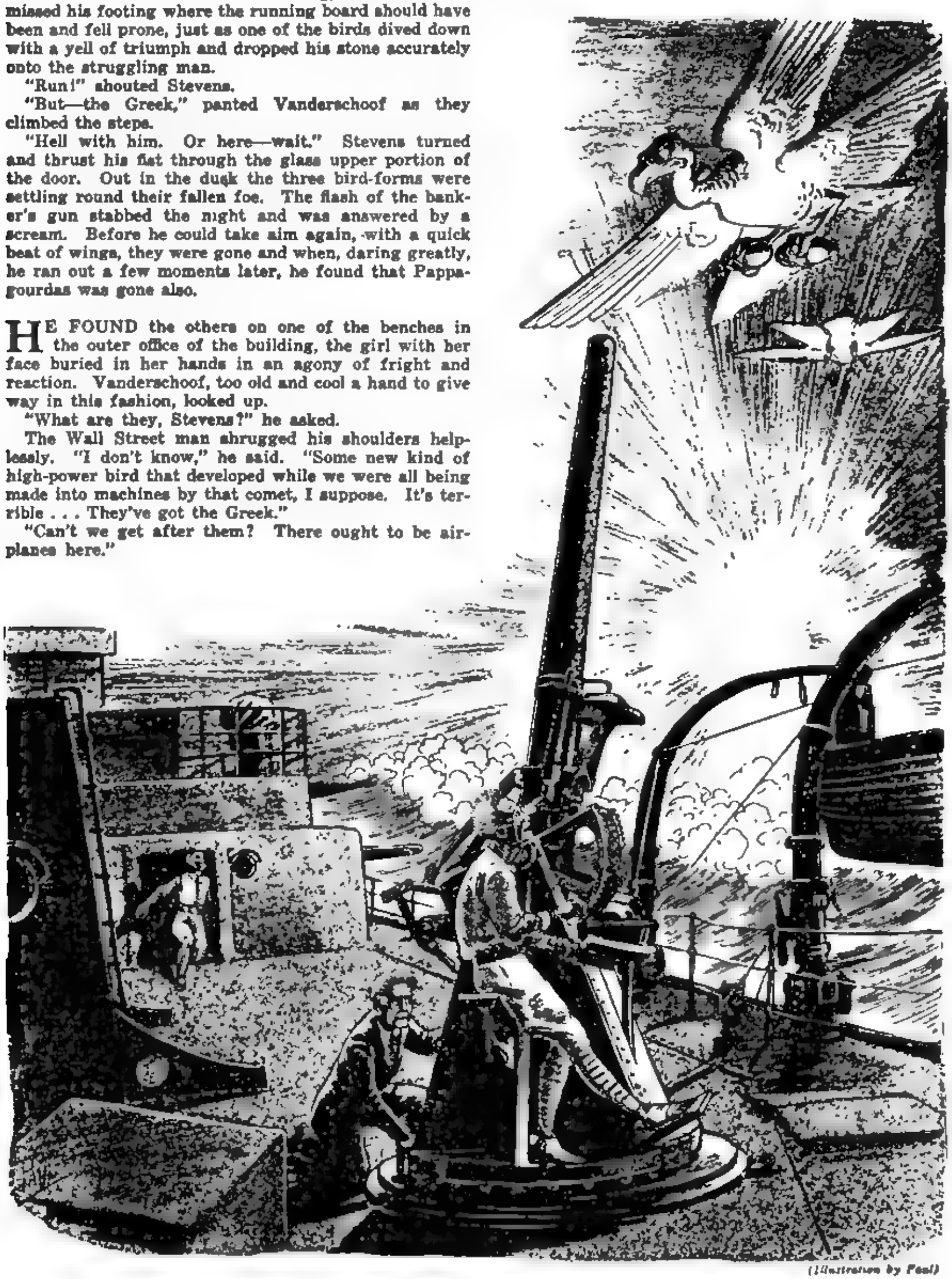
"Hell with him. Or here—wait." Stevens turned and thrust his fist through the glass upper portion of the door. Out in the dusk the three bird-forms were settling round their fallen foe. The flash of the banker's gun stabbed the night and was answered by a scream. Before he could take aim again, with a quick beat of wings, they were gone and when, daring greatly, he ran out a few moments later, he found that Pappagourdas was gone also.

HE FOUND the others on one of the benches in the outer office of the building, the girl with her face buried in her hands in an agony of fright and reaction. Vanderschoof, too old and cool a hand to give way in this fashion, looked up.

"What are they, Stevens?" he asked.

The Wall Street man shrugged his shoulders helplessly. "I don't know," he said. "Some new kind of high-power bird that developed while we were all being made into machines by that comet, I suppose. It's terrible . . . They've got the Greek."

"Can't we get after them? There ought to be airplanes here."



(Illustration by Paul)

Instead of the darkness he had expected, the deck was flung into dazzling illumination.

"In this light? Can you fly one? I can't and I don't imagine the little girl here can."

The "little girl" lifted her head. She had recovered. "What did we come to this joint for, anyhow?" she asked. "To hang crêpe on the chandeliers?"

The words had the effect of an electric shock.

"Why, of course," said Stevens, "we did come here to see if we could find someone, didn't we?" and turning round he pushed open the door into the next room. Nothing.

"Wait," he said. "Not much use trying to do anything tonight. We haven't any flashlights."

"Aw, boloney," said the dancer, "what do you want us to do? Sit here and count our fingers? Go on, big boy, find a garage, you can get a light from one of the cars."

"Won't those birds see it?"

"You got a yellow streak a mile wide, haven't you? Birds sleep at night."

Stevens took a half-unwilling step toward the door. "Let me come with you," said Vanderschoof, rising.

"What's the matter, papa? You got a little yellow in you, too?"

He was dignified. "Not at all. Here I'll leave my gun with you, Miss Lami."

"We'll be seeing you," said Stevens, over his shoulder. "Don't worry." And they were gone.

To the dancer their absence was endless. She would have given anything for the velvet kick of a good drink of gin—"but I suppose it would burn out my bearings," she mused ruefully. Heavens, she must spend the rest of her days as a robot. In the fading light she ruefully contemplated the legs that had delighted the audiences of two continents, now become ingenious mechanical devices beyond the power of delighting anyone but their owner.

More clearly than the rest, she realized that very little was left of the old relation between the sexes. What would happen when the forceful Stevens made the discovery also? Probably he would make a thinking robot of her to serve his ambition. Well, she had chosen to go with them—they seemed to offer more amusement than the stuffy prigs of the colony. . .

What was that?

She listened intently. A subdued rattling, slightly metallic in character. It might be a rat—no, too mechanical. The men—probably it was them, or one of them, returning. She glanced out of the window. Not there. The sound again—not from outdoors, but behind her—within the room? She gripped the gun Vanderschoof had given her. Rattle, rattle. She wished furiously for a light.

The birds? No—birds sleep at night. Rattle, rattle. Persistently. She stood up, trying to pierce the gathering dimness. No, the birds would make more noise. They moved surely, with hoarse screams, as though they thought themselves the lords of the world. This sound was small, like the chatter of a mechanical rat. What new horror in this strange world might it not conceal? On slenderest tiptoes she backed cautiously across the rug toward the outer door. Better the chance of the birds than this unknown terror of the darkness.

Holding the gun before her firmly, she stepped back, back, feeling with one hand for the door. Her hand met its smooth surface, then clicked as the metallic joints came in contact with the doorknob. She paused, breathless. Rattle, rattle, went the small sound, undiscouraged.

With a sudden jerk she flung the door open and tumbled down the steps, half-falling, and as she fell, as though in answer to the metallic clang of her body on the stone, a long pencil of violet light sprang silently out from somewhere back in the hills, moved thrice across the sky and then faded as swiftly as it had come.

She felt the beam of a flashlight in her eyes, and got up, hearing her voice with a sort of inward surprise as it babbled something slightly incoherent about "things—in there."

Stevens' voice, rough with irritation. "What is it you're saying?" He shook her arm. "Come on, little woman, pull yourself together."

"There must be someone else around here," remarked Vanderschoof, irrelevantly. "Did you see that searchlight?"

Marta Lami pulled herself up short, shaking loose the hand with a touch of the arrogance that had made her the queen of the night life of New York.

"Something in there gives me the heeby-jeebies," she said, pointing. "Sounds like some guy shooting craps with himself."

STEVENS laughed, somewhat forcedly. "Well, it's nothing to be scared of, unless it's one of those damn birds, and if it was that he'd be taking us apart now. Come on!"

He flung the door open and plunged in, the flashlight flickering before him. Empty.

There was a door at the further end, next to the one they had investigated before. Toward this he strode, clump, clump on the carpet, and flung it open likewise. Empty again. No, there was something. The questing beam came to rest on a brown army tunic behind the desk, followed it up quickly to the face and there held. For, staring at them with mechanical fixity was another of those simulations of the human face in metal with which they were by now, so familiar. But this one was different.

For it held the balance between the walking cartoons of men in metal, such as they themselves were, and the ugly and solid statues they had seen strewn about the streets of New York. It had the metal bands across the forehead that they possessed, above which issued the same wiry hair, but in this case curiously interwoven as though subjected to some great heat and melted into a single mass. And the nose was all of solid metal, and the eyes—the eyes . . . were the eyes of a statue, giving back no lustrous reflexion of glass.

A moment they paused breathless, then stepped forward, and as the beam of light shifted when Stevens moved, rattle, rattle, came the sound Marta Lami had heard, and when the light went back those unseeing eyes had moved.

For a few seconds no one spoke. Then:

"Good God, it's alive!" said Vanderschoof in a hushed voice and a thrill of horror went through the others as they recognized the truth of his words.

Stevens broke the spell, stepping swiftly to the desk. "Can we do anything for you?" he asked. No movement from the metal figure—only that ghastly rustle of the eyes as they turned here and there in the fixed head, searching for the light they would never find again. The Wall Street man lifted one of the hands, tried to flex the arm that held it. It dropped back to the deck with a crash. Yet the metal of which they were composed seemed in itself to be as pliant as that of their own arms.

A feeling of wonderment mingled with the horror of the spectators.

"What happened to him?" asked Marta Lami in a whisper as though she feared awakening a sleeper.

Stevens shrugged. "What's happened to all of us? He's alive, I tell you. Let's . . . get out of here. I don't like it."

"But where to?" asked Vanderschoof.

"Follow the Albany road," said Stevens. "We ought to move on. If those birds come back in the morning—" he left the sentence unfinished.

"But what about this poor egg?" asked Marta Lami.

"Leave him," said Stevens, then suddenly giving way, "there's too much mystery about this whole business around here. I'm going, I tell you, going. You can stay here till you rot if you like. I'm clearing out."

CHAPTER V

The Menace

NATURALLY, exploration of the familiar, yet unfamiliar world into which they had suddenly been thrown was the first preoccupation of the New York colonists. None of the group cared to wander far from the Institute during the first weeks, however, in view of the possible difficulty of obtaining electrical food for a long trip, and Beeville's researches on the potentialities of their new bodily form advanced so slowly that they hardly dared leave.

His discoveries in the first weeks were, in fact, purely negative. Farrelly, the publisher, smashed a finger in some machinery, but when O'Hara turned an exact duplicate out on his lathe and Beeville attached it, the new member altogether lacked sensation and could be moved only with conscious effort—an indication that some as yet unfamiliar reaction underlay the secret of motion in their metal form.

But the greatest difficulty in the way of any activity lay in the almost abysmal ignorance of the mechanical and technical arts on the part of the whole group. O'Hara was a fair mechanic; Dangerfield dabbled in radio, and Farrelly could run a printing press (he published a comical parody of a newspaper on one for several days; then abandoned the effort); but beyond that the utmost accomplishment was driving a car, and most of them realized how helpless the old civilization had been without its hewers of wood and drawers of water.

To remedy this condition, as much as to keep them busy, Ben assigned to each some branch of mechanical science to be learned, the supply of information, in the form of books, and of experimental material, in every form, being inexhaustible. Thus the first week found Tholfsen and Mrs. Roberts scouring the line of the New York Central for a locomotive in running order. After numerous failures, they succeeded in getting the thing going, only to discover that the line was blocked with wrecks and they would need a crane to clear the track for an exploring journey of even moderate length.

At the same time, Murray Lee, with Dangerfield and two or three others, made an effort to get the Park Central's broadcasting station in operation; a work of some difficulty, since it involved ventures into what were, for them, unknown fields. Daily they tap-tapped messages to each other on telegraph sets rescued from a Western Union office, in preparation for the time when they could get a sending set put together.

But the most ambitious effort and the one that was to have the largest share of ultimate consequences, was the expedition of Farrelly, Gloria and a clothing-store proprietor named Kevitz in quest of naval adventure. After a week's intensive study of marine engines from books the three appropriated a tug from the Battery and set off on a cruise of the harbor.

Half an hour later they were high and dry off Bedloe's Island, gloomily contemplating the prospect of spending their lives there, for an attempt to swim when weighted down with three hundred pounds of hardware could end only in failure. Fortunately the tide came to their rescue, and with more daring than judgment, they continued their voyage to Governor's Island, where they were lucky enough to find a solitary artilleryman, weak with hunger, but hilarious with delight at the discovery that his metallic form was not a delirium tremens delusion induced by the quart of gin he had absorbed on the night before the change.

The giant birds, which Beeville had professionally named "tetrapteryxes," seemed to have vacated the city with the appearance of the colonists. Even the nest Roberts had stumbled on proved deserted when an expedition cautiously revisited the place; and the memory of the birds had sunk to the level of a subject for idle remarks when a new event precipitated it into general attention.

Massey, the artist, with all the time in the world, and the art supplies of New York under his finger, had gone off on an artistic jag, painting day and night. One morning he took his canvas to the top of the Daily News building to paint the city at dawn from its weather-observation station. The fact that he had to climb stairs the whole way up and finally chisel through the door at the top was no bar to his enthusiasm. Kevitz, hurrying down Lexington Avenue in a car to join his fellow mariners in investigating the machinery of a freighter, saw him in the little steel cage, silhouetted against the reddening light of day.

There was an informal rule that everyone should gather at the Institute at ten in the evening, unless otherwise occupied, to report on the day's events, and when Massey did not appear two or three people made comments on the fact, but it was not treated as a matter of moment. When the artist had not shown up by dawn of the next day, however, Murray and Gloria went to look for him, fearing accident. As they approached the building Murray noticed that the edge of the weather observation platform was twisted awry. He speeded up his car, but when they arrived and climbed the mountainous flights of stairs he found no bent and damaged form, as he had expected.

THE roof of the building held nothing but the painting on which he had been working—a half-completed color sketch of the city as seen from the tower.

"Where do you s'pose he went?" asked Gloria.

"Don't know, but he went in a hurry," replied Murray. "He doesn't care about those paintings much more than he does about his life."

"Maybe he took a tumble," she suggested. "Look, there's his easel, and it's busted."

"Yes, and that little chair he totes around, and look how it's all twisted out of shape."

"Let's look over the edge. Maybe he went bugs and jumped. I knew a guy that did that once."

"Nothing doing," said Murray, peering over the parapet of the building.

Mystery.

"Say—" it was Gloria who spoke. "Do you suppose those birds—the tetra-axes or whatever Beeville calls them—?"

They turned and scanned the sky. The calm blue vault, flecked by the fleecy clouds of summer, gave no hint of the doom that had descended on the artist.

"Nothing to do but go home, I guess," said Murray, "and report another robbery in Prospect Park."

The meeting of the colonists that evening was serious.

"It comes to this, then," said Ben, finally. "These birds are dangerous. I'm willing to grant that it might not have been they who copped Massey, but I can't think of anything else. I think it's a good idea for us

to leave here only in pairs and armed, until we're certain the danger is over."

"Ain't that kind of a strong step, Mr. Ruby?" asked Kevitz. "It don't seem to me like all that business is necessary."

Ben shook his head decisively. "You haven't seen these things," he said. "In fact, I think it would be a good idea for us all to get some guns and ammunition and do target practice."

The meeting broke up on that note and the members of the colony filed into the room where the supply of arms was stored, and presently to form an automobile procession through the streets in search of a suitable shooting gallery.

When targets were finally set up in the street in automobile lights, the general mechanical efficiency of the colony revealed itself once more. Gloria Rutherford was a dead shot and the artilleryman from Governor's Island almost as good; Ben himself and Murray Lee, who had been to Plattsburg, knew at least the mechanism of rifles, but the rest could only shut their eyes and pull the trigger, with the vaguest of ideas as to where the bullet would go. And as Ben pointed out after the buildings along the street had been peppered with the major portion of Abercrombie and Fitch's stock of ammunition, the supply was not inexhaustible.

"And what shall we do for weapons then?" he asked.

Yoshio, the little Japanese, raised his hand for attention.

"I have slight suggestion, perhaps merely cat's meow and not worthy exalted attention," he offered. "Why not all people as gentlemen old time in my country, carry sword? It is better than without weapon."

"Why not, indeed?" said Ben above a hum of laughter. "Let's go." And an hour later the company reemerged from an antique store, belted with the strangest collection of swords and knives and fishing gaffs ever borne by an earthly army.

"I wonder, though," said Gloria to Murray Lee, as they reached the Institute as dawn was streaking up the sky. "All this hooey doesn't seem to mean much. If those birds are as big as that they aren't going to be scared by these little toad-stabbers."

She was right. That night Ola Mae Roberts was missing.

THE siege came a week later.

It was a week of strained tenseness; a certain electricity seemed at hand in the atmosphere, inhibiting speech. The colonists felt almost as though they were required to whisper . . .

A week during which Murray, with Dangerfield and Tholfsen, worked energetically at their radio, and progressed far enough so they could do a fairly competent job of sending and receiving in Morse code. A week during which the naval party got a freighter from the South Street docks and brought her round into the Hudson.

At dawn one morning, Gloria, with Farrelly, Kevitz and Yoshio, piled into a limousine with the idea of taking the freighter on a trip to Coney Island. Murray accompanied them to try communicating with the shore via the ship's wireless.

The day was dark, with lowering clouds, which explains why they missed seeing the tetrapteryxes. But for the General Sherman statue they never would have seen them until too late. The general's intervention was purely passive; Murray noticed and called Gloria's attention to the curious expression the misty light gave the bronze face and she looked up to see, to be recalled to her driving by a yell from Kevitz announcing the metallic carcass of a policeman squarely in their path.

Gloria twisted the wheel sharply to avoid it; the car skidded on the damp pavement, and reeling crazily, caromed into the iron fence around the statue with a crash. At the same moment an enormous mass of rock struck the place where they should have been and burst like a shell, sending a shower of fragments whistling about their ears.

Shaken and dazed by the shock, they rolled out of the car, for the moment mistaking the two impacts for one; and as they did so there came a rush of wild wings, an eldritch scream and Yoshio was snatched into the air before their very eyes. Kevitz fired first, wildly and at random. Murray steadied himself, dropping his gun across his left forearm, and shot cool and straight—but at too great a distance, and they saw nothing but a feather or two floating down from the great four-winged bird as it swung off over Central Park, carrying the little Jap. They saw him squirm in the thing's grip, trying to get his sword loose, and then with a rattle of dropped stones around them, more of the birds charged home.

Only Gloria had thought of this and withheld her fire. The others swung round as she shot and in an instant the whole group was a maze of whirling wings, clutching claws, shouts, shots and screams. In twenty seconds it was done: Gloria and Murray rose panting and breathless, and looked about. Beside them, two gigantic bird-forms were spilling their lives in convulsive agony. Dangerfield and Farrelly were gone—and a rending screech from behind the buildings told only too well where.

"What's the next step?" asked Murray with such owlish solemnity that Gloria gave a burst of half-hysterical laughter. She looked round.

"Beat it for that building," she said, and gathering her torn skirts about her, set the example.

They made it by the narrowest of margins, standing breathless in what had been the Peacock Alley of one of New York's finest hotels to see one of the great birds strut past the door like a clumsy caricature of an angel.

"And poo-poo for you," said Murray, thumbing his nose at the apparition. "But what we'll do now I don't know."

"Play pinochle till they come look us up," suggested Gloria. "Besides, my bullets are all gone."

. . . They waited all day, taking tentative glances from one or another of the windows. The birds remained invisible, apparently not caring for the prospect of a battle in the constricted space of the hotel rooms. But amid the rain and low-hung clouds they might be lurking just outside and both Murray and Gloria judged it too dangerous to venture a dash. As night came on, however, they made a try for the hotel's garage, achieved it without accident, and between them, rolled one of the cars to the door.

"Wait," said Murray, as Gloria got in, "what was that?"

"This dam' starter." She stirred her foot vigorously. "It won't work."

"No. Wait." He held out a restraining hand. A sudden gust of wind bore a dash of rain down against them and with it, from the northeast, a far-away scream, then a tapping and a heavy thud.

"Hot dog!" ejaculated Murray. "They're getting after the crowd. And at night, too."

The car jerked forward suddenly as the starter caught. "Hold it," cried Murray. "Douse those headlights." They dodged the wreck of a street car, swung

round a corner and headed for First Avenue, gathering speed. Another corner, taken on two wheels in the darkness, the way to the Institute lay before them.

Suddenly a great flame of light sprang out in the sky, throwing the whole scene into sharpest relief. There was a crash of rifle-fire from window and door of the building and across the front of it one of the birds coasted past. Crash! In the street before them something like a bomb burst, vomiting pennons of fire. Gloria swung the wheel, swung it back; they had a mad glimpse of brilliantly burning flames inside one of the buildings across the street from the Institute, and then they were tumbling out of the car with rifle-fire beating all around them and the thud of dropping objects on either side.

MURRAY stumbled, but the door was flung open and they were jerked in, just as one of the huge bird forms flung itself down past them.

"Thank God, you're safe," said Ben Ruby's voice. "They got Dearborn and Harris and they're besieging us here." He pointed out of the window across the street, where the rapidly-gaining fire was engulfing the building.

"Did the birds do that little trick?" asked Gloria.

"I hope to tell you, sister. You ain't seen nothing yet, either. They're shedding incendiary bombs all over the shop. How about Kevitz and Farrelly?"

"Got them, too. At the Plaza—and the little Jap. Too bad; I liked that little sprout."

"I thank gracious lady for kindly expressed sentiment, but oversize avians have not yet removed me," said a voice and Gloria looked down to see Yoshio bowing at her side.

"Why, how did they come to let you off? Last I saw you were doing a headspin over Central Park."

"I was fortune," replied the little man. "Removing sword I operate on said bird to such extent that he drop me as hot customer, plosh in large tree. To get home is not so easy but I remember armored car provided by intelligent corporation for transport of bankroll, so here I am. Cat's Meow!"

"Bright boy," said Gloria. "Listen!" Above their heads came another crash, a tramp of feet and shouts. Roberts dashed into the room, rifle in hand. "They've got the place on fire," he said. "We'll have to clear out."

Ben Ruby fumbled at his waist, drew forth a whistle and blew a piercing blast, which was answered by shouts, as members of the colony began to pour into the room from various points.

Another bomb burst in a fluff of light, just outside the window, throwing weird shadows across the gathering and splitting a pane here and there by the force of its impact.

"Hot stuff," remarked Gloria. "What are they trying to do—take us all at one gulp?"

"Beeville says they never thought it up on their own," Ben assured her. "Not smart enough. He thinks somebody doesn't like us and is sending them around to tell us so. Listen, everybody!"

The room quieted down.

"We've got to go at once. Our destination is the Times Square subway station. They can't get us there. Anybody who gets separated meet the rest there. We'll go in groups of three to a car; one to carry a gun, one a sword and one a light. Everybody got it? . . . Good . . . Somebody give Gloria one of those express rifles . . . Here's the list then. First party—Miss Rutherford, gun; Yoshio, sword; O'Hara, light. Go ahead."

A coil of smoke drifted across the room from somewhere above—the sough of the burning made the only background to his words. With a quick handshake the three made ready; a volley from the windows flashed out, and they dashed off. Those inside caught a glimpse of the dark form of their car as it rolled into the night. They were safe at all events. The second carload, in Yoshio's armored vehicle, also got free, but the third had trouble. They had hardly made half the distance to the parked cars before there was a whir of wings, a scream, and the quick burst of a bomb, luckily too far behind them to do damage. Those inside saw the light-man stop suddenly, flashing his beam aloft, saw an orange flame spring from the gun and then their view of the three was blotted out in a whirl of wings and action.

"Everybody out!" yelled Ben. "Now! While they're busy." In a concerted rush the colonists poured through the door.

Nobody could remember clearly what did happen. Someone was down—hurt somewhere—but was flung into a car. Through the turmoil the tossing form of one badly-wounded bird struggled on the ground, and with a roar of motors the cavalcade started.

CHAPTER VI

The Terror by Night

IT WOULD be futile—and impossible—to chronicle all the events of that wild ride; to tell how the light-bombs dropped unceasingly from above; how the driver of one car, blinded by the glare, hurtled his vehicle through the plate-glass window of a store, and how McAllister, the artilleryman, fought off the birds with a huge shard of glass from the window; how the passengers in another car, wrecked by a bomb, got a fire-engine and cleared their way to Times Square with clanging bell and clouds of malodorous fire-extinguisher chemicals; or how Mrs. Roberts decapitated one of the monsters with a single blow of the cleaver she carried.

Dawn found them, a depressed group of fourteen, gathered in the protection of the underground passages.

"Well, what next?" asked Gloria, who seemed to have preserved more of her normal cheerfulness than anyone. "Do we stay here till they come for us, or do we go get 'em?"

"We get out," said Ben Ruby. "No good here. They know too much for us."

"Right," declared Beeville. "The usual methods of dealing with animals won't work this time. They are all based on the fact that animals are creatures of habit instead of intelligence, and unless I am much wrong, these birds are intelligent and have some bigger intelligence backing them."

"You mean they'll try to bomb us out of here?" asked Roberts.

McAllister looked up from the dice he was throwing. "You bet your sweet life they will. Those babies know their stuff. The one that was after me was onto the manual of the bayonet like he'd been raised on it."

"That's nice," said Gloria, "but what are we going to do about it?"

"Get an anti-aircraft gun from the Island and shell hell out of them when they come round again," suggested the artilleryman.

"Said gun would be considerable weight for individual to transport in pocket," said Yoshio doubtfully, as Ben raised his hand for silence amid the ensuing laughter.

"There's a good deal in that idea," he said, "but I don't think it will do as it stands. The birds would bomb our gun to blazes after they had a dose or two from it. They're not so slow themselves you know. How about some of the forts? Aren't there some big ones around New York?"

McAllister nodded. "There's Hancock. We could get a ship through."

"Say!" Gloria leaped suddenly to her feet. "While we're about it, can't we get a warship—a battleship or something? Those babies would have a hot time trying to bomb one of Uncle Sam's battleships apart and there's all kinds of anti-aircraft guns on them."

"There's a destroyer in the Hudson," said someone.

"How many men does it take to run her?"

"Hundred and fifty."

"But," put in Gloria, "that's a hundred and fifty of the old style men who had to have their three squares and eight hours' sleep every day, and they did a lot of things like cooking that we won't have to. What do you say, Dictator, old scout? Shall we give it a whirl?"

"O. K.—unless somebody has something better to offer," declared Ben, and in fifteen minutes more the colonists were cautiously poking their way out of the subway station en route to take command of U. S. S. *Ward*.

Cleaning up the ship before the start took the colonists a whole day. A sooty dust, like the product of a particularly obnoxious factory, had settled over everything, and dealing with the cast-iron bodies of the sailors, wedged in the queer corners where they had fallen at the moment of the change, was a job in itself.

As night shut down, the whole crew, with the exception of Beeville and Murray Lee, who had spent some time in small boats and had therefore been appointed navigators, was busy going over the engine-room, striving to learn the complex detail of handling a warship.

Murray and Beeville were poring over their navigating charts when a step sounded outside the chart-room and the wire-frizzled head of Gloria was thrust in.

"How goes it, children?" she asked. "Do we sail for the cannibal islands at dawn?"

"Not on your life," replied Murray. "This hooker is going to pull in at the nearest garage until we learn what it's all about. Talk about arithmetic! This is worse than figuring out a time-table."

Gloria laughed, then her face became serious. "Do you think they'll bomb us again, Mr Beeville?"

"I don't see why not. They were clear winners in the last battle. But what gets me is where they come from. Why, they're a living refutation of the laws of evolution on the earth! Four wings and two legs! Although . . ." the naturalist looked at the sliding parts of his own arm, "they are rather less incredible than the evolution that has overtaken mankind, unless we're all off our heads. Do you know any way to account for it?"

"Not me," said Murray, "that's supposed to be your job; all we do is believe you when—" Bang! The anti-aircraft gun had gone off just outside with an earsplitting report. With a common impulse the three made for the door and looked upward to see the shell burst in a puff of white smoke, outlined against the dark clouds of evening, while above and beyond it sailed a black dot with whirring wings.

"That settles it," said Murray. "Whether we like it or not, we're going away from here. I wish those nuts hadn't fired though. Now the birds know what we've got. Trot down and tell them to get up steam, that's a good girl, Gloria."

The lone tetrapteryx seemed no more than a scout, for the attack was not followed up. But it takes time to get steam up on long disused marine engines and all hands were below when the real attack was delivered.

It began with the explosion of a bomb somewhere outside and a dash of water against the vessel's side that threw all of them off their feet. There was a clang of metal and a rush for the deck—cut across by Ben's voice. "Take it easy! Everybody to the engines but McAllister, O'Hara and the navigators."

The four sprang for the ladder, Murray in the lead. Crash! A sound like the thunder of a thousand tons of scrap iron on a sidewalk and the destroyer pitched wildly.

Murray's head came level with the deck. Instead of the darkness he had expected it was flung into dazzling illumination by a flare burning on the water not fifty yards away, with a light so intense that it seemed to have physical body. There was a perceptible wave of heat from it and the water round it boiled like a cauldron.

He tumbled onto the deck, running forward to trip the release of the anchor chain. At the break of the forecastle, he stumbled, and the stumble saved him, for at that moment another of the bombs fell, just in front of the fore-deck gun. The whole bow of the ship seemed to burst into intense, eye-searing flame. Deafened and blinded, Murray lay face down on the deck, trying to recover his senses; behind him the others, equally overwhelmed, tumbled on the iron surface, rolling over and over, blindly.

But the birds, apparently unaware of how heavy a blow they had struck, seemed wary of the gun. The four groveling on the deck heard scream and answering scream above them as the monsters discussed the question on the wing. If they reached a decision it was too late, for McAllister and O'Hara, blind, drunk and sick though they were, staggered to the gun and sent a shot shrieking at wild venture into the heavens. Beeville, nearer to the blinding blaze of light, recovered more slowly, but found his way to the bridge where he fumblingly pulled the engine-room telegraph over to "Full Speed Ahead."

Below, in the bowels of the vessel, there was a rumble of activity; a rapid whoosh of steam came from an exhaust pipe, a dash of sparks from the destroyer's funnels, and slowly and haltingly she began to move. Bang! went the anti-aircraft gun. Beeville heard Murray climbing the bridge behind him and then his cry, "The anchor!"

Too late—with a surge that changed to a rattle, the destroyer moved, tearing the anchor from its ground and swinging slowly half-way round as the weight dragged the damaged bow to one side. At that moment came another bomb which, but for their motion, would have struck fair and square amidships. Bang! Bang! went the anti-aircraft gun. Murray dragged at the wheel, then swung the engine-room telegraph back to "Stop." Just in time—the destroyer's bottom grated on something, her prow rent the side of a big speed-boat and she came to rest, pointing diagonally upstream.

Fortunately the attack broke off as rapidly as it had begun. A few screams, lost in the darkness of the night were the only answer to another shell from the gun. But there was no assurance that this was more than a temporary respite. Murray and Beeville strove desperately to bring the warped bridge mechanism

into running order while O'Hara routed out a blowtorch from somewhere and attacked the anchor chain, now welded into a solid mass with the deck by the force of the light-bomb. Finally, weaving to and fro in the hands of the inexperienced mariners, she was gotten round and pointed downstream and out to sea. If the birds sought them again in the darkness there was no sign of it.

Day found them stumbling down the Jersey coast, the foredeck a mass of wreckage and the ship leaking badly.

"Well, where are we now?" called a cheerful voice, as Murray Lee stood at the wheel. "Australia in sight yet?"

He looked up to see Gloria's head emerging from the companion.

"Come on up," he said, "I'm just going to turn the wheel over to Beeville and get busy with this radio. Don't think the bomb knocked it out. It did everything else, though. Look at that."

He indicated the prow of the ship, where the big gun hung down like a tired candle and the whole fore part of the vessel had dissolved into tears of metal.

"Golly," said Gloria, "that was some egg those birds laid. What was it, anyway?"

"Don't know. Never saw anything like it before. Must be some kind of new-fangled high-power incendiary bomb to melt steel down like butter. Why, even thermit wouldn't do that."

"I hope our friends don't think of looking us up here, then, or we'll be finding out what it's like to walk under water."

"You said something, sister," declared Murray. "Wait! I think it got something."

He fumbled with the radio dials before him, swinging them this way and that: then clamped on the headset. "Oh, boy, there's something coming through . . . we're not alone in the world then . . . Yes, there she is . . . Damn, I wish they wouldn't send so fast . . . AAM2 calling . . . Now who is AAM2?" His fingers pressed the key in reply as the others watched him with bated breath. "Position, seventy-three, fifty-three west longitude; forty, o-three, north latitude. Here . . ." he wrote the figures down. "Take this, one of you and dope it out. Ssh, there's more coming. Oh, he wants to know who we are and where. Call Ben, will you Gloria?"

She dashed off to return with the dictator of the colonists just as Beeville, who had been fumbling over the charts with one hand, called suddenly, "Why, the position they give is right near here—hardly a hundred miles away. I don't know just what ours is, but it can't be far from this spot. Tell them that."

"Find out who they are first," Ben put in, practically. "After what they've done, I wouldn't put it past the tetrapteryxes to handle a radio set."

". . . His Majesty's Australian ship *Brisbane*, they say," said Murray. "Wait a minute, since they're so near, I think I can switch them over to the radiophone." He ticked the key a moment, then twisted more dials and leaned back as a full and fruity voice, with a strong English accent, filled the room.

"Compliments of Captain Entwhistle of the Royal Australian Navy to the commander of the U. S. S. *Ward*, and can we arrange a meeting? The Comet appears to have done a good deal of damage in your part of the world and you are the first people we have encountered."

"Where's your microphone?" asked Ben. "Oh, there . . . Compliments of Benjamin Franklin Ruby, temporarily in command of U. S. S. *Ward* to Captain Entwhistle of the Royal Australian Navy, and none of us are sailors. We just borrowed this ship, and if you want to see us you'll have to pick us up. We'll keep along the coast toward Cape May. Can you meet us?"

A chuckle was audible from the radiophone. "I think we can manage it. Are there any of the big birds about in your part of the world? They have been bothering us all summer."

"Yes," replied Ben, "that's what we're running away from now. They've got some bombs that are pure poison and they've been making regular war on us—or probably you know about it?"

"We haven't seen anything like that yet," declared the voice from the loud-speaker, "but we've had plenty of trouble with them. Hold on a moment. Our lookout reports sighting smoke from your funnels. Hold your course and speed. We'll pick you up."

The voice ceased with a snap, and the four in the control room of the destroyer looked at each other.

"I'm glad he came around," remarked Ben. "This destroyer is getting shopworn. Besides with a good warship on hand we'll be able to give those birds what they're looking for. I hope he's got some airplanes."

"And somebody to fly them," continued Murray. "What'll we do if he has—go back and give them hell?"

"If we can. Apparently he doesn't like the birds any too well himself. It was the first thing he mentioned."

They ceased speaking as the thin pennon of smoke, followed by two tall masts, became visible over the horizon. In a few minutes more the *Brisbane* swept up, swung a circle and came to rest near them, while out from her side dropped a boat that began to move toward them with dipping oars.

A moment later she was alongside. Ben stepped out on the deck, and as he did so, there was a mutual exclamation of horrified amazement—for Captain Entwhistle of the Royal Australian Navy was as much flesh and blood as any man they had seen in the old days, but a pale blue in color, and all his sailors were of the same extraordinary hue.

CHAPTER VII

An Exploration

THERE was a moment's silence as the Australian captain steadied himself against the roll of the vessel, staring incredulously at the group that gathered round him.

"Are you—human?" he finally managed to gasp.

"If we aren't somebody's been kidding us," said Gloria, irreverently. "But are you? You're all blue!"

"Of course," said the captain. "It was the comet. We knew it struck in America somewhere but didn't know where or what it did. What's the matter with your ship?" He indicated the wrecked and leaking bow. "She seems to be down by the head."

"Oh, that was a valentine from the birds," said Ben. "Can you give us quarters on your vessel? There aren't many of us."

Captain Entwhistle seemed to come out of a dream. "Of course, of course. Come on. We can discuss things better in my cabin."

As they mounted to the deck of the *Brisbane*, even the trained sailors, the light blue of their faces oddly at variance with the dark blue of their uniforms, could not refrain from staring at the colonists. They crowded into the captain's cabin past rows of eager blue faces.

"I suggest," said Captain Entwhistle, "that we begin by telling each other how this happened. I can

scarcely credit the fact that you are human and can walk and talk. Would any of you care for a whiskey and soda?"

"No, thanks," said Murray, the spirit of fun stirring in him, "but I'll have a drink of lubricating oil if you can find any."

The naval officer looked at him, and remarked, a trifle stiffly, "Certainly, if you wish. Williams—"

"Oh, don't mind him," Ben Ruby cut in. "Pardon me, Captain, he can drink lubricating oil perfectly well, but he's just joking with you. You were saying about the comet—"

"Why, you knew that the big comet struck the earth as predicted, didn't you? It was on the morning of February sixteenth, last year—evening of February fifteenth by American time. Even in our country, which is around on the other side of the earth, it caused a good deal of damage. The gases it set free put everybody to sleep and caused a lot of wreckage. Our scientists say the gases of the comet in some unexplained way altered the iron in the hæmoglobin of our blood to cobalt. It seems to work just as well, but that's why we're all blue. I don't quite understand it myself, but you know how these medical Johnnies are. Now what happened to you people?"

"May I ask something first?" said Beeville. "What day is this?"

"August eighteenth, 1946," said the captain as though slightly baffled by the question.

"Good God!" said the scientist. "Then we were there for over a year!"

"Yes," said Ben. "All of us you see here and several others returned to consciousness about the same time, two months ago. We know nothing of what the comet did to us or how this change occurred except that when we woke up we were just what you see. Dr. Beeville has been experimenting with a view to finding out what happened, but he hasn't made much progress so far. All we know is that we're composed of metal that doesn't rust easily, make our meals off electricity, and find the taste of any kind of oil agreeable. And the birds—" he broke off with a gesture.

"Oh, yes, the birds," said the captain. "Have they been annoying you, too? That's one of the reasons, aside from exploration, why we're here. I assume you mean the big four-winged birds that we call dodos down under. We haven't seen much of them, but occasionally they come and fly away with a sheep or even a man. One of our aviators chased one several hundred miles out to sea recently and we had assumed they came from one of the islands. Our scientists don't know what to make of them."

"Neither do ours, except that they're an unadulterated brand of hell," put in Murray. "We were all living in New York, snug as bugs in a rug, when they began dropping incendiary bombs on us and carrying off anyone they could get hold of."

"Including this insignificant person," said Yoshio, proudly.

"Incendiary bombs! Do you mean to tell me they have intelligence enough for that?"

"I'll tell the cockeyed world they have! Did you see the prow of our ship? That's where one of their little presents got home. If anyone had been there, he wouldn't be anything but scrap iron now. If you really want to find out what it's all about come on up to New York, but get ready for the fight of your life."

The captain leaned back, sipping his drink meditatively. "Do you know," he said, "that's just what I was thinking of doing? Frankly your story is all but incredible, but here you are as proof of it and you don't seem to be robots, except in appearance."

"Oh, boy," whispered Murray to Gloria, "wait till these babies get after the birds with their eight-inch guns. They'll wish they'd never heard of us. I'm glad I'm going to be on hand to see the fun."

"Yeh, but maybe the birds will have something up their feathers, too," she replied. "I wouldn't like to place any bets. We thought we had them licked when we got the destroyer and now look at us."

"Well, I'm willing to try an attack, or at least a reconnaissance of them," said the captain. "Just now we're in the position of an armed exploring party. The Australian government has sent out several ships to see what it could find on the other continents. After the comet struck all the cables went dead. We got into radio communication with the Dutch colonial stations at Batavia and later with South Africa, but the rest of the world is just being re-explored and my commission authorizes me to resist unfriendly acts. I think you could call an incendiary bomb an unfriendly act."

HIS eyes twinkled over this mild witticism, and the party broke up with a scraping of chairs. A couple of hours later, the blue line of Sandy Hook was visible, and then the vague cliffs of the New York skyscrapers. The clouds had cleared away after the rain of the last few days; not even a speck of mist hung in the air and everything stood out bright and clear. The colonists felt a pang of emotion grip them as they watched the tall towers of the city rise over the horizon, straight and beautiful as they had always stood, but now without a sign of life or motion, all the busy clamor of the place hushed forever.

Of the tetrapteryxes or "dodos" as the Australian had called them, there was no sign. The sky bent high, unbrokenly blue, not a flicker of motion in it. Murray Lee felt someone stir at his side and looked round.

"Oh, damn," said Gloria Rutherford, "it's so beautiful that I want to cry. Did you ever feel like that?"

He nodded silently . . . "And those birds—isn't it a shame somehow that they should have the most beautiful city in the world?"

The shrill of a whistle cut off his words. With marvelous, machine-like precision, the sailors moved about the decks. The *Brisbane* lost way, came to a halt, and there was a rush of steel as the anchor ran out. Captain Entwhistle came down from the bridge.

"I don't see anything of your dodos yet," he said. "Do you think it would be wise to send out a landing party, Mr. Ruby?"

"Most certainly not," said Ben. "You don't know what you're up against yet. Wait till they come round. You'll have plenty to do."

The captain shrugged. Evidently he was not at all unwilling to match the Australian navy against anything the dodos might do. "Very well, I'll accept your advice for the present, Mr. Ruby. It is near evening in any case. But if there is no sign of them in the morning, I propose to land and look over the city."

But the landing was never accomplished.

For, in the middle of the night, as Ben, Murray and Gloria were seated in the chartroom of the ship, chatting with the young lieutenant on duty there, there came a quick patter of feet on the deck, and a shout of "Light, ho!"

"There are your friends now, I'll wager," said the lieutenant. "Now watch us go get 'em. If you want to see the fun, better go up on the bridge. All we do here is wrestle slide-rules."

Hastily the three climbed the bridge, where a little

group of officers was clustered. Following the direction in which they were looking, they saw, just above the buildings on the Jersey shore, what looked like a tall electric sign, burning high in the air and some distance away, with no visible means of support.

"What do you make of it?" asked Captain Entwhistle, turning and thrusting a pair of glasses into Ben's hands. Through them he could read the letters. Printed in capitals, though too small to be read from the ship with the naked eye, he saw:

"SOFT MEN EXIT. HARD MEN ARE WORKERS BELONGING. MUST RETURN. THIS MEANS YOU."

"Looks like a dumb joke by someone who doesn't know English very well," he opined, passing the glasses to Gloria. "I don't think those birds would figure that out anyway."

"Wait a minute, though," said Gloria, as she read the letters. "Remember they caught Dangerfield and Farrelly and the rest. Maybe they taught them how to speak."

"Yes, but those two didn't know anything about 'soft men.' It's all crazy, like Tweedledum and Tweedledee. And what do they mean by 'belonging'? None of our gang thought up that bright remark."

"Look, sir," said one of the younger officers, "it's changing."

Abruptly the lights were blotted out, to reappear, amid a swimming of colors, nearer and larger. "WARNING" they read this time, "FLY AWAY ACCURSED PLACE."

"What beats me," said Ben, "is what makes that light. I'll bet a dollar against a dodo-feather it isn't electrical and fireworks wouldn't hang in the air like that. How do they do it?"

"Well, we'll soon find out," said the Captain, practically. "Mr. Sturgis, switch on searchlights three and four and turn them on the source of that light."

A few quick orders and two long beams of light leaped out from the ship toward the source of the mysterious sky-writing—leaped, but not fast enough, for even as the searchlights sought for their goal the lights were extinguished and the long beams swung across nothing but the empty heavens.

Gloria shivered. "I think I want to go away from this place," she said. "There's too much we don't know about around here. We'll be getting table-tappings next."

"Apparently someone wants us to clear out," said Captain Entwhistle cheerfully. "Mr. Sturgis, get steam on three boilers and send the men to reserve action stations. We may have something doing here before morning."

Orders were shouted, iron doors were slammed and feet pattered in the interior of the warship. From their station on the bridge Ben, Gloria and Murray could see the long shafts of the turret guns swing upward to their steepest angle, then turn toward the Jersey shore. The *Brisbane* was preparing for emergencies.

But there was to be no fight that night, though all night long the weary sailors stood or slept beside their guns. The dark skies remained inscrutable; the mysterious lights did not reappear.

At four o'clock, Captain Entwhistle had retired, reappearing at eight, fresh as though he had slept through the whole night. The colonists, of course, did not need sleep, but while the sailors stared at them, submitted themselves to an electric meal from one of the ship's dynamos. Morning found them gathering about the upper decks, eager for action, particularly McAllister, who had spent most of the night engaged in highly technical discussions of the *Brisbane's* artillery with one of the turret-captains.

"What do you suggest?" asked the captain. "Shall we land a party?"

"I hate to go without taking a poke at those birds," said Ben, "but still I don't think it would be safe—"

"What's the matter with that airplane?" asked Gloria, pointing to the catapult between the funnels, where a couple of blue-visaged sailors had taken the covering from a seaplane and were giving it a morning bath.

The captain looked at Ben. "There may be something in that idea. What do you say to a scout around? I'll let you or one of your people go as an observer."

"Tickled to death," Ben replied. "We never got beyond the upper part of the city ourselves. The dodos were too dangerous. I'd like to find out what it's all about."

"How about me?" offered Gloria.

"Nothing doing, kid. You get left this time. If those birds get after us we may land in the bay with a bump and I don't want this party to lose its little sunshine."

"Up anchor!" came the command. "Revolutions for ten knots speed . . . I'm going to head down the bay," he explained to the colonists. "If anything happens I want to have sea-room, particularly if they try bombing us."

Fifteen minutes later, with the *Brisbane* running into the morning land-breeze in an ocean smooth as glass, the catapult let go and Ben and the pilot—a lad whose cheeks would have been rosy before the comet, but were now a vivid blue—were shot into the air.

Beneath them the panorama of New York harbor lay spread; more silent than it had been at any day since Hendrick Hudson brought his high-pooped galleys into it. As they rose, Ben could make out the line of the river shining through the pearly haze like a silver ribbon; the towers of the city tilted, then swung toward them as the aviator swept down nearer for an examination. Everything seemed normal save at the north and east, where a faint smoky mist still lingered over the buildings they had occupied. Of birds, or of other human occupation than their own, there was no slightest sign.

A faint shout was borne to his ears above the roar of the motor and he saw the pilot motioning toward a set of earphones.

"What do you say, old chap?" asked the pilot when he had clamped them on. "What direction shall we explore?"

Ben glanced down and around. The cruiser seemed to hang in the water, a tiny droplet of foam at her bow the only sign she was still in motion. "Let's go up the Hudson," he suggested. "They seemed to come from that direction."

"Check," called the pilot, manipulating his controls. The airplane climbed, swung and went on. They were over Yonkers; Ben could see a river steamer at the dock, where she had made her last halt.

"Throw in that switch ahead of you," came through the earphones. "The one marked RF. That's the radiophone for communicating with the ship. We may need it."

"O.K.," said Ben . . . "Hello . . . Yes, this is Ruby, in the airplane. Nothing to report. Everything serene. We're going to explore farther up the river."

In the distance the Catskills loomed before them, blue and proud. Ben felt a touch on his back and

looked round. The pilot evidently wished to say something else. He cut in and heard, "What's that off on the left—right in the mountains? No, there."

Following the indicated direction Ben saw something like a scar on the projecting hillside—not one of the ancient rocks, but a fresh cut on the earth, as though a wide spot had been denuded of vegetation.

"I don't know," he answered. "Never saw it before. Shall we go see? . . . Hello, *Brisbane*. Ruby reporting. There is a mysterious clearing in the Catskills. We are investigating."

CHAPTER VIII

"The Dodos are Bombing

THE bare area seemed to run all down a long valley and spread out as it rounded the crest of a hill which hid what lay behind it from their view. As they watched a grey speck that might have been an ant at that height and distance, lumbered slowly down the valley, and then Ben noticed a tiny flicker of red light, so bright as to be clearly visible even in the day, where the grey speck moved against the hillside. A door seemed to open in the hillside; focusing the glasses the aviator handed him, he could just make out a square, bulky object that trundled forth. And then one—two—three—four—five of the huge dodo-tetrapteryx birds shot out, poised for a moment, and leaped into flight.

"Hello, *Brisbane*," called Ben into the radiophone. "Five dodos have taken off from the cutting in the hills. I think they are after us. Better turn back this way and get ready for trouble."

The aviator, understanding without being warned, had turned the plane. Ben swung round to look over his shoulder. The dodos were already some yards in the air; behind them the bulky object was running slowly out of the opening in the hillside. It had the appearance of a very long, flexible cannon. As he held his glasses on it, it stopped, straightened out and the muzzle was elevated in their direction.

"Dive!" he shouted suddenly into the voice-tube, entirely on impulse. The airplane banked sharply and seemed to drop straight down, and at the same instant right through the spot where they had just passed shot a beam of light so brilliant that it outshone the morning sun. There was a roar louder than that of the motor; the plane pitched and heaved in the disturbed air, and the light-beam went off as suddenly as it had snapped on.

"Didn't I tell you those babies were poison?" he remarked. "Boy, if that ever hit us!"

"What was it?" asked the aviator's voice.

"Don't know, but it was something terrible. Let's head for home and mamma. I don't care about this."

The plane reeled as the pilot handled the controls. Rrrr! said something and the light-beam shot out again, just to one side this time. Out of the corner of his eye Ben could see one of the birds—gaining on them!

"How do you work this machine-gun?" he asked.

"Just squeeze the trigger. Look out! I'm going to dive her again."

With a roar, the light-beam let go a third time. Ben saw the edge of it graze their right wing-tip; the airplane swung wildly round and down, with the pilot fighting for control; the earth seemed to rush up to meet them, tumbling, topsy-turvy. Ben noted a warped black spot where the beam had touched the wing-tip, then surprisingly, they were flying along, level with the surface of the Hudson beneath them, and hardly a hundred feet up.

"That was close," came the aviator's voice, shaky with relief. "I thought they had us that time. Say, that's some ray they have."

"It sure is one first-class heller," agreed Ben. "Are you far enough down to duck it now?"

"I think so, unless they can put it through the hills or chase us with it. Do you suppose those dodos thought that up themselves?"

"Can't tell. They're right on their toes, though. Look!" He pointed up and back. Silhouetted against the sky, they could see three of them, flying in formation like airplanes. "Can we make it?"

"I'm giving the old bus all she'll stand. The *Brisbane* will come toward us though. Wait till those guys get going. They'll find we can take a trick or two."

Yonkers again. Ben looked anxiously over his shoulder. The three silhouettes were a trifle nearer. Would they do it? 125th Street and the long bridge swung into view, then Riverside Drive and the procession of docks with the rusting liners lying beside them. Ben waggled the machine-gun, tried to adjust its sights and squeezed the trigger. A little line of smoke-puffs leaped forth. Tracer bullets—but nowhere near the birds. On and on—lower New York—the Battery. Wham! The water beneath and behind them boiled. Ben looked up. The birds were above them, too high to be reached, dropping bombs.

"All right, old soaks," he muttered, "keep that up. You'll never hit us that way."

Again something struck the water beneath them. The airplane pitched and swerved as the pilot changed course to disturb the aim of the bombers. In the distance the form of the cruiser could be seen now, heading toward them. As he watched, there was a flash from her foredeck. Up in the blue above them appeared the white burst of a shell, then another and another.

One of the dodos suddenly dived out of the formation, sweeping down more swiftly than Ben would have believed possible. He swung the gun this way and that, sending out streams of tracers, but the bird did not appear to heed. Closer—closer—and then with a crash something burst right behind him. The airplane gyrated; the water rushed upward. The end? he thought, and wondered inconsequentially whether his teeth would rust. The next moment the water struck them.

WHEN Ben Ruby came to, he beheld a ceiling which moved jerkily to and fro and stared lazily at it, wondering what it was. Then memory returned with a snap; he sat up and looked about him. He was in one of those cubby-holes which are called "cabins" on warships, and alone. Beneath him he could hear the steady throb of the engines; at his side was a small table with a wooden rack on it, in one compartment of which stood a glass, whose contents, on inspection, proved to be oil. He drank it, looked at and felt of himself, and finding nothing wrong, got out of the hammock and stepped to the door. A seaman was on guard in the corridor.

"Where is everybody?"

"On deck, sir. I hope you are feeling all right now sir."

"Top of the world, thanks. Is the aviator O.K.?"

"Yes, sir. This way."

He ascended to the bridge, to be greeted riotously by the assembled company. The *Brisbane* was steaming steadily along in the open sea, with no speck of land in sight and no traces of the giant birds.

"What happened?" Ben asked. "Did you get rid of 'em?"

"I think so. We shot down two and the rest made off after trying to bomb us. What did you two find out?"

Ben briefly described their experiences. "I thought there was something wrong with one of your wing-tips," said the captain, "but your plane sank so quickly after being hit that we didn't have time to examine it. That light-ray cannon of theirs sounds serious. Do you suppose the dodos managed it?"

"Can't tell," said Ben. "From what I could make out through the glasses, it didn't look like birds that were handling it."

"But what could it be?"

"Ask me! Delirium tremens, I guess. Nothing in this world is like what it ought to be any more. Where did those birds come from; how did we get this way, all of us; who is it up there in the Catskills that don't like us? Answer me those and I'll tell you who was handling the gun."

"Message, sir," said a sailor, touching his cap, and handing a folded paper. The captain read it, frowning.

"There you are—" he extended the sheet to Ben. "My government is recalling all ships. Our sister-ship the *Melbourne*, has been attacked off San Francisco and severely damaged by bomb-dropping dodos, and they have made a mass descent on Sumatra. Gentlemen, this has all the characteristics of a formal war." He strode off to give the necessary orders to hurry the cruiser home, but Walter Beeville, who had joined the group at the bridge, said under his breath:

"If those birds have enough intelligence to plan out anything like that I'll eat my hat."

. . . . . .

"If you were not before my eyes," said Sir George Graham Harris, president of the Australian Scientific Commission, "as living proof of what you say, and if our biological and metallurgical experts did not report that your physiology is utterly beyond their comprehension, I do not know but that I would believe you some cleverly constructed machines, actuated in some way by radio. However, that is not the point . . . I have here a series of reports from different quarters on such explorations as have been made since the arrival of the comet and our recovery from its effects. We are, it appears, confronted with a menace of considerable seriousness in the form of these birds.

"In the light of your closer acquaintance with them and with conditions generally in the devastated areas, they may be more suggestive to you than to us." He stopped and ruffled over the papers piled beside him at the big conference table. He was a kindly old gentleman, whose white Van Dyke and pale blue lips contrasted oddly with the almost indigo tint of his visage (before the comet it had been a rich wine-red, the result of a lifelong devotion to brandy and soda). Smiling round the table at his scientific colleagues and at Ben, Murray, Gloria and Beeville, who occupied the position of honor, he went on:

"I give you mainly excerpts . . . The first is from the South African government. They have . . . hm, hm . . . sent an aerial expedition northward, all lines of communication appearing to be broken. At Nairobi, they report for the first time, finding a town entirely unoccupied and its inhabitants turned into cast-metal statues . . . Addis Ababa the same . . . Wadi Hafa likewise. Twenty miles north of Wadi Hafa they noted the first sign of life—a bird of some kind at a considerable distance to the west of them and flying parallel with them and very rapidly."

The scientist looked up. "It would appear beyond doubt that this bird belonged to the species we call dodos and to which Dr. Beeville has given the excellent scientific name, tetrapteryx . . . As the expedition proceeded northward, they encountered more of them; sometimes as many as four being in sight at one time. At Alexandria, where they halted for supplies, the dodos closed in. When the expedition took the air again with the object of flying to Crete and thence to Europe, these remarkable avians came very close, apparently trying to turn the expedition back. They reached Crete that afternoon, in spite of the interference of the birds, but that night were actively attacked on the ground. The phenomena that accompanied all other attacks were observed; the birds used incendiary bombs of great intensity. One machine was entirely destroyed with its aviators. The others, since their object was exploration, at once took to the air and returned.

"Any comments, gentlemen? No? Well the next is the report of the Dutch ship *Corlaer*, which attempted to reach Japan. She was permitted to proceed to within a few miles of the islands, and then began to receive light-warnings in the sky, such as Captain Entwhistle reports. Unfortunately they were in Japanese characters and there was no one aboard who could read them. She put in at the port of Nagasaki and sent out a landing party. It never returned; as in the other cases the ship was bombed at night and only made Sumatra with the greatest difficulty, one of the bombs having fallen on the quarter-deck, wrecking the steering-gear and causing extensive internal damage . . .

"There are minor reports with which I will not bother you. But the report of H. M. A. S. *Melbourne* appears highly significant. She touched at several South American ports. In the cities she reports finding all life at a standstill, although at Iquique, the landing party encountered some hill-Indians who had suffered a bluing of the blood similar to ours, and who proved distinctly unfriendly. They are reported as engaged in looting the city and getting drunk on the contents of the bodegas.

"North of Callao she found no signs of life until she reached San Pedro Bay. There a man was observed to be waving from the beach. The *Melbourne* put in and launched a boat, but before it reached shore, one of the birds made its appearance overhead and the man disappeared into the trees and was not seen again. From the ship he appeared to be a mechanical man, such as you. Shortly afterward, the *Melbourne* began to see the dodos constantly, and at the region of San Francisco, she saw one of the light signals. The wording of it was: 'DEPART AWAY FAREWELL FOREVER.'"

Gloria stirred and Sir George looked at her with mild eyes. "Nothing, sir. I was just thinking that these dodos are uncommonly poetical. They told us to fly from the accursed place."

"Yes, yes . . . Naturally the *Melbourne*, not anticipating any trouble as the result of a refusal to obey this absurd command, did not heed the warning, and steamed into the bay. Like the other ships she was attacked at night. One of the bombs fell on the fire-control station and wrecked it, bringing down the tripod mast and fusing the top of the conning tower. She got under way immediately and replied with all guns, but before escaping number three turret was struck by another bomb and all the men in the turret were killed. The roof of the turret was driven in and even the breeches of the guns melted . . . That, I think, summarizes the reports we have. We have seen

a little of the birds, mostly at a distance, and they appear to have carried off several individuals, especially in Sumatra. I am afraid that is all we can offer."

There was a moment's silence.

"Well, what the material in the bombs is I can't say," said Ben, "but they know all about projecting it from guns in the form of a beam. I told you about my experience in company with the aviator from the *Brisbane!*"

"The eggs Roberts found, too," said Gloria.

"Oh, yes, Dr. Beeville can tell you about that."

"Why, there's nothing much to it," said the scientist. "One of our people found what appeared to be a nest of these birds in a building. The nest was built of soft cloths and contained large eggs, but when the place was revisited the eggs had been removed. . . . I may say that I have examined the remains of one rather badly mangled specimen. The brain-case is extraordinarily large—larger than I have ever seen in any animal, and they appear to be of a high order of intelligence.

"On the other hand I should certainly put the use and control of such a material as these bombs contain beyond their powers. And the fact that the nest was found in a building would indicate that the headquarters in the Catskills were used by some other and higher intelligence which was separate from and perhaps in control of these birds. Moreover, they do not appear to wish to destroy us mechanical men, but to carry us off, and the messages seen by the ships seem to indicate that the intelligence behind these birds is capable of reading and understanding English. I cannot conceive that the birds themselves would be able to do this.

"Further, there is the very strong evidence of the gun which fired on Mr. Ruby. In every case where these birds have attacked man, they have used bombs of this material put up in portable form, although the gun would have been much more effective. It would have gone right through the *Melbourne* or the *Brisbane* like a red-hot poker through a board. From this I argue that the birds are directed rather than directing, and that the directing intelligence is either too indolent or too contemptuous of us to attack man except through their agency. Finally, I deduce that we are dealing with some powerful and as yet unknown form of life. What it is or how it reached the earth, I am not prepared to say."

"Wunnerful," said Gloria irreverently, and a smile passed across the faces of the conferees.

"But what are the bombs made of and what makes them tick?" asked Murray Lee.

"That is a question to which I would very much like to know the answer," said Sir George, stroking his white beard. "Perhaps Mr. Nasmith, our chemical member, will be good enough to give us something on the point."

"Not much," said Nasmith, a lantern-jawed man with black hair. "We made a chemical analysis of the portions of the *Melbourne* which had been struck by the bombs, and all we can say is that it gave a most extraordinary result. These portions were originally made of Krupp armor steel, as you know. Our analysis showed the presence of a long series of chemical elements, including even gold and thorium, most of them in minute quantities. Titanium appeared to be the leading constituent after iron."

"Then," said Sir George, "the situation appears to be this. We don't know what the dodos are or what is behind them, but they have possession of a large part of the world to which they are disposed to forbid us any access. They have powerful weapons and the intelligence to use them, and they appear to be unfriendly. I suggest that the sense of this meeting is that the government should take immediate measures of investigation and if necessary, of hostility."

"Swell," said Gloria, "only you didn't go half far enough. We've been there and you haven't. You want to get the best guns you've got and go for them right away."

There was a murmur of approval. As Sir George rose to put the question to a vote there came a knock at the door. Heads were turned to greet a young man who hurried to the president and whispered something. Sir George turned to the meeting with a startled face.

"Ladies and gentlemen," he said, "the dodos are bombing Canberra, the capital of Australia, and are being engaged by the Australian air force."

CHAPTER IX

The Opening of the Conflict

"I'M GLAD," said Gloria to Murray Lee, as they leaned against the rail of the steamer *Paramatta* in their new American Army uniforms, "that they're going to attack these things in the old U. S. I'd hate like anything to think we last Americans were shoved out of our country by a lot of chickens."

Murray glanced around him. In every direction the long lines of the convoy stretched out, big liners loaded to the funnels with men, guns, tanks and ammunition. On the fringes of the troopships the sleek grey sides of the cruisers and destroyers that protected them were visible, and overhead there soared an armada of fast airplanes—no mere observation machines, or peaceful explorers like the South Africans, but fierce, deadly fighting planes, rocket-powered, which could step along at four miles a minute and climb, dive and maneuver better than a dodo.

He nodded. "You said something, sister. Say won't it be great to take a whack at them under the Stars and Stripes. I'm glad they let us do it, even if there are only fourteen of us."

In the four months since the conference with the Australian Scientific Committee it had been amply demonstrated to the three remaining governments of the world that there was not room for both man and dodos on the same planet. A carefully-worked out campaign had evidently been set in operation by whatever central intelligence led the four-winged birds with the object of wiping human life from the earth. The bombing of Canberra was merely the first blow.

While Australia was arming and organizing to meet the menace the second blow fell—on Sourabaya, the great metropolis of Java, which was wiped out in a single night. At this evidence of the hostile intentions of the dodos radio apparatus began to tap in Australia, in the Dutch colonies and in South Africa; old guns forgotten since the last great war, were wheeled out; the factories began to turn out fighting airplanes and the young men drilled in the parks.

When, late in November, a flock of twenty-five dodos was observed over north Australia, headed for Sydney, the forces of the defence were on their guard. Long before the birds reached the town they were met by a big squadron of rocket-powered fighting planes and in a desperate battle over the desert, with claw and beak and bomb against machine-gun, were shot down to the last bird. With that the attacks had suddenly ceased, and the federated governments, convinced that it was

but the calm before a greater storm, had gathered their strength for a trial of arms.

It was realized that whatever lay behind this attempt to conquer all there was left of the old earth must be in some way due to the coming of the great comet and must center somewhere in America, where the comet had struck. So for the first time the race of man began to learn what international cooperation meant. Delegates from the three surviving governments met in conference at Perth with Ben Ruby accorded a place as the representative of the United States. The decision of the conference was to mobilize every man and weapon to attack the birds in America and exterminate them there if possible; if impossible to do this, then to keep them so occupied at home that they would be unable to deliver any counter-attack.

There was plenty of shipping to carry an army far larger than the federated governments could mobilize; the main weakness of the expedition lay in the lack of naval protection, for the great navies of the world had perished when the northern hemisphere passed under the influence of the comet. It was sought to make up for this deficiency by a vast cloud of airplanes, flying from the decks of many merchant ships, converted into aircraft carriers, though some of the new rocket-planes were powerful enough to cruise around the world under their own power. And so, on this March morning in 1947 the whole vast armada was crossing the Atlantic toward the United States. In view of the fact that the headquarters of the dodos seemed to be somewhere in the Catskills, it had been decided to land in New Jersey, form a base there and work northward.

In the preliminary training for the coming conflict the metal Americans had played an important part. Their construction made them impossible as aviators, which they would have preferred. But quite early it was discovered that they made ideal operators for tanks. The oil fumes and the lack of air did not in the least affect beings to whom breathing had become unimportant, and the oil was actually a benefit.

As a result the little American army had been composed of fourteen tanks of a special type, fitted at the direction of the military experts, with all the latest and best in scientific devices. They were given extra-heavy armor, fitted in two thicknesses, with a chamber between, as a protection against the light-bombs, and each tank, intended to be handled by a single operator, was provided with one heavy gun, so arranged that it could be used against aerial attack.

A STIR of motion was visible at the head of the convoy. A destroyer dashed past the *Paramatta*, smoke pouring from her funnels, the white bow-wave rising as high as her bridge as she put on full speed. From the airplane carrier just behind them in the line, one, two, three flights of fighters swung off, circled a moment to gain altitude and then whirled off to the north and west.

"What is it?" asked Gloria.

A sailor touched his cap. "Sighted a dodo, I believe, miss," he said.

"Oh, boy," said Gloria, "here we go. What would you give to be in one of those planes?"

They craned their necks eagerly, but nothing was visible except a few flecks in the sky that might be dodos or might equally well be airplanes. Faint and far, a rattle of machine-guns drifted down; there was a flash of intense light, like the reflection in a far-distant mirror, and the machine-guns ceased. A few moments later the airplanes came winging back to their mother ship. A sailor on her deck began to swing his arms in the curious semaphore language of the sea.

"What happened?" asked Gloria of the man by their side.

"I'm trying to make out, miss. One dodo, he says, carrying a bomb—hit—by—machine-gun . . . Oh, the bomb went off in the dodo's claws and blew him all to pieces."

The echo of a cheer came across the water from the other ships. The first brush had gone in favor of the race of man!

That night dodos announced their presence by a few bombs dropped tentatively among the ships, but did no damage, being so hurried and harried by the airmen, and by morning the dream-towers of Atlantic City, flecked with the early morning sun, rose out of the west. Far in the distance the aviators of the expedition had spied more of the birds, but after the first day's encounter with the airplanes they kept a healthy distance, apparently contented to observe what they could.

As ship after ship swung in toward the piers and discharged its cargo of men, guns and munitions, the birds became bolder, as though to inspect what was going on. But the Australian aviators attacked them fiercely, driving them back at every attempt to pierce the aerial cordon, and when night came on, nearly a third of the force had been landed and quartered in parts of the one-time pleasure city.

Covered by the darkness a few dodos came down to drop bombs that night. They met with poor success. Delicate listening apparatus, intended originally to pick up the sound of approaching enemy airplanes had been one of the first things landed. The whir of the birds' wings was plainly audible, and before they had realized that man had a weapon to meet their night attacks half a dozen of them had been caught in the bursts of anti-aircraft guns and more had been met and shot down by the night-patrolling airmen.

The next morning saw the unloading beginning anew, while the emptied transports were taken around into Delaware Bay. Fortunately, the weather continued unusually fine for late March, bright with sunshine, giving the dodos no opportunity to attack behind the cover of clouds. There was just enough cold in the air to make the Australians and South Africans lively, though the Americans found the temperature caused the oil to move sluggishly in their metallic joints.

At daybreak the whole American unit had been pushed out to the railroad line at Greenwood with the advance guard of tanks, and finding no opposition they continued on to Farmington, where there was an airport that would serve for the leading squadrons of planes.

"Do you know," said Ben to Murray, "I wish those dodos would show a little more pep. Fighting them is no cinch. We're a little ahead of the game now, but it's largely because they've let us alone and haven't brought up any of those light-beam guns."

"Maybe we've got 'em on the run," replied Murray. "You can't tell when anyone will develop a yellow streak, you know."

"Yes, but we've seen enough of these babies to know they haven't got a yellow streak a millimeter wide in their whole make-up. Yet here they let us do just about as we please. Makes me think they're just laying for us, and when they get us where they want us—zowie!"

"Mebbe so, mebbe so," replied Murray. "Beeville still thinks it isn't the birds at all; that they've got a big boss somewhere running the whole works and till we find out what's behind it we're fighting in the dark. Well, they'll unload the rest of the army tomorrow and then we'll get down to cases."

THE country between Atlantic City and Philadelphia is flat, with a few gentle elevations and dotted with small towns, farms and tiny bits of woodland. In the cold spring morning of the next day, with rain portended, the army of the federated governments pushed out along the roads through this land like a huge, many-headed snake, tanks and airplanes in the lead, the steady ranks of infantry and the big guns coming behind. Back at Atlantic City all machine-shops and factories had been set in operation and wrecking crews were already clearing the railroads and mounting huge long-range guns on trucks, preparatory to covering the advance. All along the route was bustle and hurry; camp kitchens rumbled along, harassed officers galloped up and down the lines on their horses (now, like their masters with a strange bluish cast of skin) and messengers rushed to and fro on popping motorcycles.

(Illustration by Paul)

One of the things would swing its trunk around and discharge a lightbolt at a house or other object.

Out with the advance the American division of fourteen tanks rolled along. The dodos seemed to have completely disappeared, even the scouting aviators, far ahead, reporting no sign of them. The army was succeeding in establishing itself on American soil.

But around noon a "stop" signal flashed on the control boards of the tanks. They halted at the crest of a little rise and climbed out to look around.

"What is it?" asked someone.

"Perhaps gentlemanly general wishes to disport in surf," suggested Yoshio, with his flashing, steel-toothed smile, "and proceeding is retained without presence."

"Perhaps," said Gloria, "but I'll bet a dollar to a handful of blue kangaroos that the dodos are getting in their licks somewhere."

"Well, we'll soon know," said Murray Lee. "Here comes a dispatch rider."

The man on the motorcycle dashed up, saluted. "General Ruby?" he inquired, and handed the dispatch to Ben. The latter read it, then motioned the others about him.

"Well, here it is, folks," he said, "Listen to this—'General Grierson to General Ruby. Our flank guard was heavily attacked at Atsion this morning. The Third

Brigade of the Fourteenth Division has suffered heavy loss and has been forced back to Chew Road. We are bringing up heavy artillery. The enemy appear to be using large numbers of light-ray guns. Advance guard is recalled to Waterford in support of our left flank.'"

"Oh—oh," said somebody.

"I knew they'd start giving us hell sooner or later," remarked Murray Lee as he climbed into his tank.

At Waterford there was ordered confusion when they arrived. Just outside the town a long line of infantrymen were plying pick and shovel in the formation of a system of trenches. Machine-gun units were installing themselves in stone or brick buildings and constructing barricades around their weapons; line after line of tanks had wheeled into position under cover of woods or in the streets of the town, the little whippets out in front, fast cruiser-tanks behind them and the lumbering battle-tanks with their six-inch guns, farther back.

Artillery was everywhere, mostly in little pits over which the gunners were spreading green strips of camouflage. As the American tanks rolled up, a battery of eight-inch howitzers behind a railroad embankment at the west end of the town was firing slowly and with an air of great solemnity at some target in the invisible distance, the angle of their muzzles showing that they were using the extreme range. A couple of airplanes hummed overhead. But of dead or wounded, of dodos or any other enemy there was no sign. It might have been a parade-war, an elaborately realistic imitation of the real thing for the movies.

Guides directed the Americans to a post down the line toward Chew Road. "What's the news?" asked Ben of an officer whose red tabs showed he belonged to the staff.

"They hit the right wing at Atsion," replied the officer. "Just what happened, I'm not sure. Somebody said they had a lot of those light-ray guns and they just crumpled up our flank like that." He slapped his hands together to show the degree of crumpling the right flank had endured. "We lost about fifteen hundred men in fifteen minutes. Tanks, too. But I think we're stopping them now."

"Any dodos?" asked Ben.

"Just a few. The airplanes shot down a flock of seven just before the battle and after that they kept away . . . What is it? General Witherington wants me? Oh, all right, I'll come. Excuse me, sir," and the staff officer was off.

Most of the afternoon was spent in an interminable period of waiting and watching the laboring infantry sink themselves into the ground. About four o'clock a fine, cold drizzle began to fall. The Americans sought the shelter of their tanks, and about the same time their radiophones flashed the order to move up, toward the north and east through a barren pasture with a few trees in it, to the crest of a low hill. It was already nearly dark; the tanks bumped unevenly over the stony ground, their drivers following each other by the black silhouettes in the gloom. Off to the right a battery suddenly woke to a fever of activity, then as rapidly became silent and in the intervals of silence between the motor-sounds the Americans could catch the faint rat-tat of machine-guns in the heavens above. Evidently dodos were abroad in the gloom.

At the crest of the hill they could see across a flat valley in the direction of Chew Road. Something seemed to be burning behind the next rise; a ruddy glare lit the clouds. Down the line guns began to growl again, and the earth trembled gently with the sound of an explosion somewhere in the rear. Murray Lee, sitting alone at the controls of his tank. So this was war!

There were trees along their ridge, and looking through the side peep-hole of his tank Murray could make out the vague forms of a line of whippets among them, waiting, like themselves, for the order to advance. He wondered what the enemy were like; evidently not all dodos, since so many tanks had been pushed up to the front. This argued a man or animal that ran along the ground. The dodos seemed to spend most of their time in the air. . .

He was recalled from his meditations by the ringing of the attention bell and the radiophone began to speak rapidly:

"American tank division—enemy tanks reported approaching. Detain them as long as possible and then retire. Your machines are not to be sacrificed. Radio your positions with reference to Clark Creek as you retire for guidance of artillery registering on enemy tanks. There—"

The voice broke off in mid-sentence. So the dodos had tanks! Murray Lee snapped in his controls and glanced forward. Surely in the gloom along that distant ridge there was a darker spot—next to the house—something.

Suddenly, with a roar like a thousand thunders, a bolt of sheer light seemed to leap from the dark shape on the opposite hill, straight toward the trees where Murray had noticed the whippets. He saw one of the trees leap into vivid flame from root to branch as the beam struck it; saw a whippet, sharply outlined in the fierce glow, its front armor-plate caving; then its ammunition blew up in a shower of sparks, and he was frantically busy with his own controls and gun.

CHAPTER X

Hopelessness

ALL ALONG the line of the American tanks the guns flamed; flame-streaked fountains of dirt leaped up around the dark shape on the opposite hill and a burst of fire came from the farmhouse beside it as a misdirected shell struck it somewhere.

The beam from the unknown enemy snapped off as suddenly as it had come on, leaving, like lightning, an aching of the eyes behind it. Murray Lee swung his tank round, making for the reverse slope of the hill to avoid the light-beam. Crack! The beam came on again —right overhead this time. It flashed through the treetops leaving a trail of fire. He heard a torn branch bang on the roof of his tank, manipulated the gun to fire at the source of the beam and discovered that the magazine was empty. As he bent to snap on the automatic shell-feeding device, a searchlight from somewhere lashed out toward the black shape that opposed them, then went off. In the second's glimpse it afforded the enemy appeared as a huge, polished, fish-shaped object, its mirror-like sides unscarred by the bombardment it had passed through, its prow bearing a long, prehensible snout—apparently the source of the light-beam.

Suddenly a shell screamed overhead and the whole scene leaped into dazzling illumination as it burst just between the enemy tanks and their own. It must be a shell from the dodos! The federated armies had no shells that dissolved into burning light like that. Then another and another, a whole chorus of shells, falling in the village behind them. Murray had a better look at their opponent in the light. It seemed to lie flush with the ground; there was no visible means of either support or propulsion. It was all of twenty feet in diameter, widest near the head, tapering backward. The questing snout swung to and fro, fixed its position and discharged another of those lightning-bolts. Off to the

right came the answering crash as it caved in the armor of another of the luckless whippets. He aimed his gun carefully at the base of the snout and pulled the trigger; on the side of the monster there appeared a flash of flame as the shell exploded, then a bright smear of metal —a direct hit, and not the slightest damage!

Ben Ruby's voice came through the radiophone, cool and masterful. "Pull out, folks, our guns are no good against that baby. I'm cutting off; radio positions back to the heavy artillery. Put the railroad guns on."

Murray glanced through the side peep-hole again—one, two, three, four, five—all the American tanks seemed undamaged. The monster had confined its attention to the whippets, apparently imagining they were doing the shooting. He pulled his throttle back, shot the speed up, rumbling down the hill, toward the village. As he looked back, darkness had closed in; the brow of the hill, its rows of trees torn and broken by the light-beam stood between him and the enemy. Before him amid the flaring light of the enemy shells was a stir of movement, the troops seemed to be pulling out also.

The tanks rumbled through the streets of Waterford and came to a halt on a corner behind a stone church which held three machine-gun nests. Murray could see one of the gunners making some adjustment by the light of a pocket torch and a wave of pity for the brave man whose weapon was as useless as a stick swept over him.

A messenger dashed down the street, delivered his missive to someone, and out of the shadows a file of infantry suddenly popped up and began to stream back, getting out of range. Then, surrounded by bursts of artillery fire, illumined by the glare of half a dozen searchlights that flickered restlessly on and off, the strange thing came over the brow of the hill.

It halted for a moment, its snout moving about uneasily as though it were smelling out the way, and as it did so, it was joined by a second. Neither of them seemed to be in the least disturbed by the shells all the way from light artillery to six-inch, that were bursting about them, filling the air with singing fragments. For a moment they stood at ease, then the left-hand one, the one that had led the advance, pointed its snout at the village and discharged one of its flaming bolts. It struck squarely in the center of an old brick house, whose cellar had been turned into a machine-gun nest. With a roar, the building collapsed, a bright flicker of flames springing out of the ruins. As though it were a signal every machine-gun, every rifle in the village opened fire on the impassive shapes at the crest of the hill. The uproar was terrific; even in his steel cage Murray could hardly hear himself think.

The shining monster paid no more attention to it than to the rain. One of them slid gently forward a few yards, turned its trunk toward the spouting trenches, and in short bursts, loosed five quick bolts; there were as many spurts of flame, a few puffs of earth and the trenches became silent, save for one agonized cry, "First aid, for God's sake!"

Ben Ruby's voice came through the microphone. "Retreat everybody. Atlantic City if you can make it."

WITH a great, round fear gripping at his heart, Murray Lee threw in the clutch of his machine and headed in the direction he remembered as that of the main road through the town toward Atlantic City. The night had become inky-black; the town was in a valley and the shadow of trees and houses made the darkness even more Stygian. Only by an occasional match or flashlight glare could the way be seen, but such light as there was showed the road already filled with fugitives. Some of them were helmetless, gunless, men in the last extremity of terror, running anywhere to escape from they knew not what.

But through the rout there plowed a little company of infantry, revealed in a shell-burst, keeping tight ranks as though at drill, officers at the head, not flying, but retreating from a lost battle with good heart and confidence, ready to fight again the next day. The dancing beam of a searchlight picked them out for a moment; Murray Lee looked at them and the fear died within him. He slowed up his machine, ran it off the road and out to the left where there seemed to be a clearing that opened in the direction of the town. After all, he could at least observe the progress of the monsters and report on them.

He was astonished to find that he had come nearly a mile from the center of the disturbance. Down there, the glittering monsters, still brightly illumined by searchlight and flare, seemed to be standing still amid the outer houses of the town, perhaps examining the trench system the Australians had dug that afternoon. The gunfire on them had ceased. From time to time one of the things, perhaps annoyed at the pointlessness of what it saw, would swing its trunk around and discharge a light-bolt at house, barn or other object. The object promptly caved in, and if it were wood, began to burn. A little train of the blazing remains of buildings marked the progress of the shining giants, and threw a weird red light over the scene.

Now that he could see them clearly, Murray noted that they were all of fifty or sixty feet long. Their polished sides seemed one huge mirror, bright as glass, and a phosphorescent glow hung about their tails. Along either side was a slender projection like the bilge-keel of a ship, terminating about three quarters of the way along, and with a small dot of the phosphorescence at its tip. They seemed machines rather than animate objects. Murray wondered whether they were, or (remembering his own evolution into a metal man) whether they were actually metal creatures of some unheard-of breed.

As he watched, a battery out beyond the town that had somehow gotten left behind, opened fire. He could see the red flash-flash-flash of the guns as they spoke; hear the explosions of the shells as they rent the ground around the giants. One of them swung impassively toward the battery; there were three quick stabs of living flame, and the guns ceased firing. Murray Lee shuddered—were all man's resources, was all of man, to disappear from the earth? All his high hopes and aspirations, all the centuries of bitter struggle toward culture to be wiped out by these impervious beasts?

He was recalled from his dream by the flash of light at his control board and a voice from the radiophone " . . . to all units," came the message. "Railroad battery 14 about to fire on enemy tanks in Waterford. Request observation for corrections . . . General Stanhope to all units. Railroad battery 14, twelve-inch guns, about to fire on enemy tanks in Waterford. Request observation for correction. . ."

"Lieut. Lee, American Tank Corps, to General Stanhope," he called into the phone. "Go ahead with railroad battery 14. Am observing fire from east of town."

Even before he had finished speaking there was a dull rumble in the air and a tremendous heave of earth behind and to one side of the shining enemy, not two hundred yards away. "Lieut. Lee to railroad battery 14," he called, delightedly, "two hundred yards over, ten yards right." Berrrroum! Another of the twelve-inch shells fell somewhere ahead of the giants in the village. As Murray shouted the correction one of the metal crea-

tures lifted its snout toward the source of the explosion curiously and as if it had not quite understood its meaning, fired a light-beam at it. Another shell fell, just to one side. A wild hope surging in him, he called the corrections—these were heavier guns than any that had yet taken a hand.

"Lieut. Lee, American Tank Corps, to railroad battery 14—Suggest you use armor-piercing shell. Enemy tanks appear to be armored," he called and had the comforting reply. "Check, Lieut. Lee. We are using armor-piercers." Slam! Another of the twelve-inch shells struck, not ten yards behind the enemy. The ground around them rocked; one of them turned as though to examine the burst, the other lifted its snout skyward and released a long, thin beam of blue light, not in the least like the light-ray. It did not seem to occur to either of them that these shells might be dangerous. They seemed merely interested.

And then—the breathless watchers in the thickets around the doomed town saw a huge red explosion, a great flower of flame that leaped to the heavens, covered with a cloud of thick smoke, pink in the light of the burning houses, and as it cleared away, there lay one of the monsters on its side, gaping and rent, the mirrored surface scarred across, the phosphorescent glow extinguished, the prehensile snout drooping lifelessly. Murray Lee was conscious of whooping wildly, of dancing out of his tank and joining someone else in an embrace of delight. They were not invincible then. They could be hurt—killed!

"Hooray!" he cried, "Hooray!"

"That and twelve times over," said his companion.

The phrase struck him as familiar; for the first time he looked at his fellow celebrant. It was Gloria.

"Why, where in the world did you come from?" he asked.

"Where did you? I've been here all the time, ever since Ben ordered us home. Didn't think I'd run out on all the fun, did you? Are those things alive?"

"How do I know? They look it but you never can tell with all the junk that comet left around the earth. They might be just some new kind of tank full of dodos."

"Yeh, but—" The buzzing roar of one of the light-rays crashing into a clump of trees not a hundred yards away, recalled them to themselves. Gloria looked up, startled. The other monster was moving slowly forward, systematically searching the hillside with its weapon.

"Say, boy friend," she said, "I think it's time to go away from here. See you at high mass."

BUT the conference at headquarters in Hammonton that night was anything but cheerful.

"It comes to this, then," said General Grierson, the commander-in-chief of the expedition. "We have nothing that is effective against these dodo tanks but the twelve-inch railroad artillery, using armor-piercing shell and securing a direct hit. Our infantry is worse than useless; the tanks are useless, the artillery cannot get through the armor of these things, although it damages the enemy artillery in the back areas."

Ben Ruby rubbed a metal chin. "Well, that isn't quite all, sir. One of the American tanks was hit and came through—damaged I will admit. The lightning, or light-ray these dodos threw, penetrated the outer skin but not the inner. We could build more tanks of this type."

General Grierson drummed on the table. "And arm them with what? You couldn't mount a twelve-inch gun in a tank if you wanted to, and we haven't any twelve-inch guns to spare."

One of the staff men looked up. "Has airplane bombing been tried on these—things. It seems to me that a one or two-thousand pound bomb would be as effective as a twelve-inch shell."

"That was tried this afternoon," said the head of the air service, with an expression of pain. "The 138th bombing squadron attacked a group of these tanks. Unfortunately, the tanks kept within range of their light-ray artillery and the entire squadron was shot down."

"Mmm," said the staff man. "Let's add up the information we have secured so far and see where it leads. Now first they have a gun which shoots a ray which is effective either all along its length or when put up in packages like a shell, and is rather like a bolt of lightning in its effect. Any deductions from that?"

"Might be electrical," said someone.

"Also might not," countered Walter Beeville. "Remember the *Melbourne's* turret. No electrical discharge would produce chemical changes like that in Krupp steel."

"Second," said the officer, "they appear to have three main types of fighting machines or individuals. First, there are the dodos themselves. We know all about them, and our airplanes can beat them. Good . . . Second, there is their artillery—a large type that throws a beam of this emanation and a smaller type which throws it in the form of shells. Thirdly, there are these—tanks, which may themselves be the individuals we are fighting. They are capable of projecting these discharges to a short distance—something over four thousand yards, and apparently do not have the power of projecting it in a prolonged beam, like their artillery. They are about fifty feet long, fish-shaped, heavily armored and have some unknown method of propulsion. Check me if I'm wrong at any point."

"The projection of these lightning-rays would seem to indicate they are machines," offered General Grierson hopefully.

"Not on your life," said Beeville, "think of the electric eel."

"As I was saying," said the staff man, "our chief defect seems a lack of information, and—"

General Grierson brought his fist down on the table. "Gentlemen!" he said. "This discussion is leading us nowhere. It's all very well to argue about the possibilities of man or machine in time of peace and at home, but we are facing one of the greatest dangers the earth has ever experienced, and must take immediate measures. Unless someone has something more fruitful to develop than this conference has provided thus far, I shall be forced to order the re-embarkation of what remains of the army and sail for home. My duty is to the citizens of the federated governments, and I cannot uselessly sacrifice more lives. Our supply of railroad artillery is utterly inadequate to withstand the numbers of our adversaries. Has anyone anything to offer?"

There was a silence around the conference table, a silence pregnant with a heavy sense of defeat, for no one of them but could see the General was right.

But at that moment there came a tap at the door. "Come," called General Grierson. An apologetic under-officer entered. "I beg your pardon, sir, but one of the iron Americans is here and insists that he has something of vital importance for the General. He will not go away without seeing you."

"All right. Bring him in."

There stepped into the room another of the mechanical Americans, but a man neither Ben Ruby nor Beeville had ever seen before. A stiff wire brush of moustache stood out over his mouth; he wore no clothes but a kind of loin-cloth made, apparently, of a sheet. The metal plates of his powerful body glittered in the lamp-

light as he stepped forward. "General Grierson?" he inquired, looking from one face to another.

"I am General Grierson."

"I'm Lieutenant Herbert Sherman of the U. S. Army Air Service. I have just escaped from the Lassans and came to offer you my services. I imagine your technical men might wish to know how they operate their machines and what would be effective against them, and I think I can tell you."

CHAPTER XI
Capture

HERBERT SHERMAN had wakened with a vague sense of something wrong and lay back in his seat for a moment, trying to remember. Everything seemed going quietly, the machine running with subdued efficiency . . . It came to him with a jerk—he could not hear the motor. With that subconscious concentration of the flying man on his ship, he glanced at the instrument board first, and taking in the astonishing information that both the altimeter and the air-speed meter registered zero, he looked over the side. His vision met the familiar dentilated line of the buildings surrounding the Jackson Heights airport, with a tree plastered greenly against one of them. Queer.

His sense of memory began to return. There was the night-mail flight from Cleveland; the spot of light ahead that grew larger and larger like the most enormous of shooting stars, the sensation of sleepiness . . . He remembered setting the controls to ride out the short remainder of the journey with the automatic pilot on the Jackson Heights' radio beam, since he was clearly not going to make Montauk. But what came after that?

Then another oddity struck his attention. He recalled very clearly that he had been flying over the white landscape of winter—but now there was a tree in full leaf. Something was wrong. He clambered hastily from the cockpit.

As he swung himself over the side, his eye caught the glint of an unfamiliar high-light on the back of his hand and with the same stupefaction that Murray Lee was contemplating the same phenomenon several miles away, he perceived that instead of a flesh-and-blood member he had somehow acquired an iron hand. The other one was the same—and the arm—and the section of stomach which presently appeared when he tore loose his shirt to look at it.

The various possibilities that might account for it raced through his mind, each foundering on some fundamental difficulty. Practical joke—imagination—insanity—what else? Obviously some time had elapsed. But how about the ground staff of the airport? He shouted. No answer.

Muttering a few swears to himself he trudged across the flying field, noting that it was grown up with daisies and far from newly rolled, to the hangars. He shouted again. No answer. No one visible. He pounded at the door, then tried it. It was unlocked. Inside someone sat tilted back in a chair against the wall, a cap pulled over his face. Sherman walked over to the sleeper, favoring him with a vigorous shake and the word, "Hey!"

To his surprise the stranger tilted sharply over to one side and went to the floor with a bang, remaining in the position he had assumed. Sherman, the thought of murder jumping in his head, bent over, tugging at the cap. The man was as metallic as himself, but of a different kind—a solid statue cast in what seemed to be bronze.

"For Heaven's sake!" said Herbert Sherman to himself and the world at large.

There seemed to be nothing in particular he could do about it; the man, if he had ever been a man, and was not part of some elaborate scheme of flummery fixed up for his benefit, was beyond human aid. However there was one way in which all difficulties could be solved. The sun was high and the town lay outside the door.

. . . He spent a good deal of the day wandering about Jackson Heights, contemplating such specimens of humanity as remained in the streets, fixed in the various ungraceful and unattractive attitudes of life. He had always been a solitary and philosophical soul, and he felt neither loneliness nor overwhelming curiosity as to the nature of the catastrophe which had stopped the wheels of civilization. He preferred to meditate on the vanity of human affairs and to enjoy a sense of triumph over the ordinary run of bustling mortals who had always somewhat irritated him.

In justice to Herbert Sherman it should be remarked that he felt no trepidation as to the outcome of this celestial joke on the inhabitants of the world. Beside being an aviator he was a competent mechanic, and he proved the ease with which he could control his new physique by sitting down in a restaurant next to the bronze model of a sleepy cat, removing one shoe and sock and proceeding to take out and then replace the cunningly concealed finger-nut which held his ankle in position, marvelling at how any chemical or other change could have produced a threaded bolt as an integral part of the human anatomy.

Toward evening, he returned to the flying field and examined his machine. One wing showed the effect of weathering, but it was an all-metal Roamer of the latest model and it had withstood the ordeal well. The gasoline gauge showed an empty tank, but it was no great task to get more from the big underground tanks at the field. Oil lines and radiators seemed all tight and when he swung the propeller, the motor purred for him like a cat.

With a kind of secret satisfaction gurgling within him Herbert Sherman taxied across the field, put the machine into a climb, and went forth to have a look at New York.

He thought he could see smoke over central Manhattan and swung the Roamer in that direction. The disturbance seemed to be located at the old Metropolitan Opera House which, as he approached it, seemed to have been burning, but had now sunk to a pile of glowing embers. The fire argued human presence of some kind. He took more height and looked down. Times Square held a good many diminutive dots, but they didn't seem to be moving.

HE SWUNG over to examine the downtown section. All quiet. When he returned he saw a car dodging across Forty-Second Street and realizing that he could find human companionship whenever he needed it, which he did not at present, he returned to the flying field.

At this point it occurred to him to be hungry. Reasoning the matter out in the light of his mechanical experience, he drank a pint or more of lubricating oil and searched for a place to spend the night. Not being sleepy he raided a drug store where books were sold, for as much of its stock as he could use, and arranging one of the flares at the field in a position convenient for reading, he settled down for the night. In the course of it he twice tried smoking and found that his new make-up had ruined his taste for tobacco.

With the first streaks of day he was afoot again, going over the Roamer with a fine-toothed comb, since he had no mechanic to do it for him, tuning her up for a

long flight. He had no definite purpose in mind beyond a look round the country. Was it all like this, or only New York?

Newark attracted his attention first. He noted there were ships at most of the piers in the river and that none of them bore signs of life. Neither had the streets on the Jersey side of the river any occupants other than those who were obviously still forever.

As he flew along toward the Newark airport, a shadow fell athwart the wing and he looked up.

A big bird was soaring past, flying above and fully as fast as the plane. In his quick glance Sherman caught something unfamiliar about its flight, and leaned over to snap on the mechanical pilot while he had another look. The bird, if bird it was, was certainly a queer specimen; it seemed to have two sets of wings and was using them as though it were an airplane, with the fore pair outstretched and rigid, the hind wings vibrating rapidly. As he gazed at the bird it drew ahead of the plane, gave a few quick flips to its forewings and banked around to pick him up again.

It was coming closer and regarding him with an uncommonly intelligent and by no means friendly eye. Sherman swung his arm at it and gave a shout—to which the bird paid not the slightest attention. Newark was running away under him. Reluctantly, he resumed control of the stick, put the plane into a glide and made for the airport. It occurred to him that this would be an awkward customer if it chose to attack him and he meditated on the possibility of finding a gun in Newark.

The field was bumpy, but he taxied to a stop and climbed out to look over the silent hangars before one of which a little sports plane stood dejectedly, with a piece of torn wing flapping in the breeze. As the Roamer came to rest he looked back at the bird. It was soaring away up in a close spiral, emitting a series of screams. Sherman determined to find a gun without delay.

Newark was like Jackson Heights; same stony immobility of inhabitants, same sense of life stopped at full tide in the streets. He prowled around till he found a hardware store and possessed himself of a fine .50-.50 express rifle with an adequate supply of cartridges as well as a revolver, added to it a collection of small tools, and stopped in at a library to get a supply of reading matter more to his taste than the drug store could provide.

As he took off again two specks in the sky far to the north represented, he decided, additional specimens of the peculiar bird life that had spread abroad since the change. How long it could have been, he had no idea.

He decided on a flight northwest, following the line of the mail route. There was a chance that the whole country might not be engulfed by this metal plague, though the absence of life in New York was not encouraging.

PORT JERVIS was his first control point, but Sherman was fond enough of the green wooded slopes of the Catskills to run a little north of his course, bumpy though the air was over the mountains. He set the automatic pilot and leaned back in his seat to enjoy the view.

Just north of Central Valley something seemed different about the hillside; a new scar had appeared along its edge. He turned to examine it, swooping as he did so and in a quick glance from the fast-moving airplane saw that the great forest trees, maples and oaks, were all down, twisted, barren and leafless, along a line that ran right up the valley and across the hill, as though they had been harrowed by some gigantic storm. The line was singularly definite; there were no half-broken trees.

He swooped for another look, and at that moment was conscious of the beat of swift wings and above the roar of the motor heard the scream of one of those strange four-winged birds. Half-unconsciously, he put the Roamer into a steep climb and kicked the rudder to one side, just as the bird flew past him on whistling pinions, like an eagle that has missed its plunge, and recovered to rise again in pursuit. Sherman flattened out, and without paying any attention to direction, snapped in the automatic pilot and reached for his gun.

As he bent there came a sharp crack from above and behind him and another scream right overhead. He looked over his shoulder to see a second bird clutching at the edge of the cockpit with one giant claw, its forewings fluttering rapidly in the effort to keep its balance in the propeller's slipstream. With the other claw it grabbed and grabbed for him.

Sherman flattened himself against the bottom of the cockpit and fired up and back, once—twice—three times. The plane rocked; the bird let go with a shrill scream, a spurt of blood showing on its chest feathers, and as Sherman straightened up he saw it whirling down, the wings beating wildly, uselessly, the red spot spreading. But he had no time for more than a glance. The other bird was whirling up to the attack beneath him, yelling in quick jerks of sound as though it were shouting a battle-cry.

The pistol, half-empty, might too easily miss. Sherman sought the rifle, and at that moment felt the impact of a swift blow on the floor of the plane. The bird understood that he had weapons and was attacking him from beneath to avoid them! The thought that it was intelligent flashed through his mind with a shock of surprise as he leaned over the side, trying to get a shot at his enemy. Beneath the plane he caught a momentary glimpse of the ground again, torn and tortured, and in the center of the devastation the ruins of a farmhouse, its roof canting crazily over a pulled-out wall.

The bird dodged back and forth, picking now and then at the bottom of the plane with its armored beak. He leaned further trying to get in a shot, and drew a chorus of yells from the bird, but no more definite result. Bang! Again. Miss. Out of the tail of his eye he saw the line of green leap into being again. Flap, flap went the wings beneath him.

Suddenly from below and behind him there rose a deep humming roar, low pitched and musical. Abruptly the screaming of the bird ceased; it dropped suddenly away, its forewings folded, the rear wings spread, glider-like as it floated to the ground. He turned to look in the direction of the sound, and as he turned a great glare of light sprang forth from somewhere back there, striking him full in the eyes with blinding force. At the same moment something pushed the Roamer forward and down, down, down. He could feel the plane give beneath him, but in the blind haze of light his fumbling fingers could not find the stick, and as he fell a wave of burning heat struck his back and the sound of a mighty torrent reached his ears. There was a crash and everything went out in a confusion of light, heat and sound.

. . . . . .

When he recovered consciousness the first thing he saw was a blue dome, stretched so far above his head that it might have been the sky save for the fact that the light it gave had neither glare nor shadow. He puzzled idly over this for a moment, then tried to turn his head. It would not move. "That's queer," thought Herbert Sherman, and attempted to lift an arm. The

hands responded readily enough but the arms were immovable. With an effort he tried to lift his body and discovered that he was tightly held by some force he could not feel.

Herbert Sherman was a patient man but not a meek one. He opened his mouth and yelled—a good loud yell with a hard swearword at the end of it. Then he stood still for a moment, listening. There was a sound that might be interpreted as the patter of feet somewhere, but no one came near him, so he yelled again, louder if possible.

This time the result accrued with a rapidity that was almost startling. A vivid bluish light struck him in the face, making him blink, then was turned off, and he heard a clash of gears and a hum that might be that of a motor. A moment later he felt himself lifted, whirled round, dropped with a plunk, and the blue dome overhead began to flow past at rapidly mounting speed to be blotted out in a grey dimness. He perceived he was being carried down some kind of a passage whose ceiling consisted of dark stone. A motor whirred rapidly.

The stone ceiling vanished; another blue dome, less lofty, took its place. The object on which he was being carried stopped with a mechanical click and he was lifted, whirled round again and deposited on some surface. Out of the corner of his eye he caught a glimpse of something round, of a shining black coloring, with pinkish highlights, like the head of some enormous beast, and wiggled his fingers in angry and futile effort.

HE WAS flopped over on his face and found himself looking straight down at a grey mass which from its feel on nose and chin, appeared to be rubber.

He yelled again, with rage and vexation and in reply received a tap over the head with what felt like a rubber hose. He felt extraordinarily helpless. And as the realization came that he was helpless, without any control of what was going on he relaxed. After all, there was no use . . . Some kind of examination was in progress. There was the sound of soft-treading feet behind him.

After a slight pause he was bathed in a red light of such intensity as to press upon him with physical solidity. He closed his eyes against it, and as he did so, felt a terrible pain in the region of his spine. Was it death? He gripped metallic teeth together firmly in an effort to fight the pain without yelling (perhaps this was deliberate torture and he would not give them the satisfaction) and dully, amid the throbbing pain, Sherman heard a clatter of metal instruments. Then the pain ceased, the light went off and something was clamped about his head.

A minute more and he had been flipped over on his back, and with the same whirring of motors that had attended his arrival, was carried back through the passage and into the hall of the blue dome. He was still held firmly; but now there was a difference. He could wiggle in his bonds.

With a clicking of machinery, he was tilted up on the plane that held him. A hole yawned before his feet and he slid rapidly down a smooth incline, through a belt of dark, to drop in a heap on something soft. The trapdoor clicked behind him.

He found himself, unbound, on a floor of rubber like texture and on rising to look around, perceived that he was in a cell with no visible exit, whose walls were formed by a heavy criss-crossed grating of some red metal. It was a little more than ten feet square; in the center a seat with curving outlines rose from the floor, apparently made of the same rubbery material as the floor itself. A metallic track ended just in front of the seat; following back, his eye caught the outline of a kind of lectern, now pushed back against the wall of the cell, with spaces below the reading flat and handles attached. Against the back wall of the cell stood a similar device, but larger and without any metal track. Beside it two handles dangled from the wall on cords of flexible wire.

This was all his brief glance told him about the confines of his new home. Looking beyond it, he saw that he was in one of a row of similar cells, stretching back in both directions. In front of the row of cells was a corridor along which ran a brightly-burnished metal track, and this was lined by another row of cells on the farther side.

The cell at Sherman's right was empty, but he observed that the one on the left had a tenant—a metal man, like himself in all respects and yet—somehow unlike. He stepped over to the grating that separated them.

"What is this place, anyway?" he inquired.

His neighbor, who had been sitting in the rubber chair, turned toward him a round and foolish face with a long, naked upper lip, and burst into a flood of conversation of which Sherman could not understand one word. He held up his hand. "Wait a minute, partner," he said. "Go slow. I don't get you."

The expression on the fellow's face changed to one of wonderment. He made another effort at conversation, accompanying it with gestures. "Wait," said the aviator, *"Sprechen Sie Deutsch? . . . Francais? . . . Habla Espanol? . . .* No? Dammit what does the guy talk. I don't know any Italian—Spaghetti, macaroni, Mussolini!"

No use. The metal face remained blankly uninspired. Well, there is one thing men of all races have in common. Sherman went through the motions of drawing from his pocket a phantom cigarette, applying to it an imaginary match, and blowing the smoke in the air.

It is impossible for a man whose forehead is composed of a series of lateral metal bands to frown. If it were the other would have done so. Then comprehension appeared to dawn on him. He stepped across to his lectern, and *with his toes*, pulled the bottom slide open, extracted from it a round rubber container and reaching through the bars, handed it to Sherman.

The aviator understood the difference that had puzzled him in the beginning. Instead of the graceful back-sweeping curve that sets a man's head vertical with his body, this individual had the round-curved neck and low-hung head of the ape.

CHAPTER XII

The Poisoned Paradise

TO HIDE his surprise Sherman bent his head to examine the object the ape-man had handed him. It was about the size of a baseball with little holes in it. He inserted a finger in one of the holes, and a stream of oil squirted out and struck him in the eye. His neighbor gave a cry of annoyance at his clumsiness and reached through the bars to have the ball returned. As he received it there came sudden flickerings of lights along the hall from somewhere high up, like the trails of blue and green rockets. The mechanical ape-man dropped the oil-ball and dashed to the front of his cell.

Sherman saw a vehicle proceeding down the line of cells; a kind of truck that rode on the track of the corridor and was so wide it just missed the gratings. It had a long series of doors in its sides, and as it came opposite an occupied cell, stopped. Something invisible happened; the bars of the cell opened inward

and the inmate emerged to step into a compartment which at once closed behind him.

When it stopped at the ape-man's cage Sherman watched the procedure closely. A little arm appeared from beneath the door of the compartment and did something to one of the lower bars of the cell. But the truck passed Sherman by, moving silently along to other cells beyond him.

He turned to examine the room more closely, and as he did so, saw that a second truck was following the first. This one, with an exactly reversed procedure, was returning robots to their cells. This second truck dropped an inmate in the cell at his right (another ape-man) and trundled along down the line, but as it reached the end of the corridor, turned back and running along till it came to his cell, stopped, flung out the metal arm, and opened the bars in invitation.

Sherman had no thought of disobeying; as long as he was in this queerest of all possible worlds, he thought, one might as well keep to the rules. But he was curious about the joint of the cage and how it unlocked and he paused a moment to examine it. The machine before him buzzed impatiently. He lingered. There came a sudden clang of metal from inside the car, a vivid beam of blue light called his attention, and looking up, he saw the word "EXIT" printed in letters of fire at the top of the compartment.

With a smile he stepped in. A soft light was turned on and he found himself in a tiny cubbyhole with just room for the single seat it provided and on which he seated himself. There was no window.

The machine carried him along smoothly for perhaps five minutes, stopped and the door opened before him. He issued into another blue-domed hall. A small one this time, containing a rubber seat like that in his cell, but with an extended arm on which rested a complex apparatus of some kind. The seat faced a white screen like those in movie theaters.

He seated himself and at once a series of words appeared in dark green on the screen. "Dominance was not complete," it said. "Communication?" Then below, in smaller type, as though it were the body of a newspaper column. "Lassans service man. Flier writing information through communication excellent. Dinner bed, book. No smoking. Yours very truly."

As he gazed in astonishment at this cryptic collection of words it was erased and its place was taken by a picture which he recognized as a likeness of himself in his present metallic state. A talking picture, which made a few remarks in the same incomprehensible gibberish the ape-man had used, then sat down in a chair like that in which he now rested, and proceeded to write on the widespread arm with a stylus which was attached to it. The screen went blank . . . Evidently he was supposed to communicate something by writing.

The stylus was a metal pencil, and the material of the arm, though not apparently metallic, must be, he argued from the fact that it seemed to have electric connections attached. As he examined it, the blue lights flickered at him impatiently. "The white knight," he wrote in a fit of impish perversity, "is climbing up the poker." Instantly the words flashed on the screen.

Pause. "IS CLIMBING" declared the screen, in capitals; then below it appeared a fairly creditable picture of a knight in armor followed by a not very creditable picture of a poker. Sherman began to comprehend. Whoever it was behind this business had managed a correspondence course of a sort in English, but had failed to learn the verbs and he was being asked to explain.

For answer he produced a crude drawing of a monkey climbing a stick and demonstrated the action by getting up and going through the motions of climbing. Immediately the screen flashed a picture of the knight in armor ascending the poker by the same means, but it had hardly appeared before it was wiped out to be replaced by a flickering of blue lights and an angry buzz. His interlocutor had seen the absurdity of the sentence and was demanding a more serious approach to the problem. For answer Sherman wrote, "Where am I and who are you?"

A longer pause. "Dominance not complete," said the screen. Then came the picture of the first page of a child's ABC book with "A was an Archer who shot at a frog" below the usual childish picture. Then came the word "think." With the best will in the world Sherman was puzzled to illustrate this idea, but by tapping his forehead and drawing a crude diagram of the brain as he remembered it from books, he managed to give some satisfaction.

THE process went on for three or four hours as nearly as Sherman could judge the time, ending with a flash of the word "Exit" in red from the screen and a dimming of the blue-dome light. He turned toward the door and found the car that had brought him, ready for the return journey. As it rumbled back to his cell he ruminated on the fact that none of the men (or whatever it was) behind this place had yet made themselves visible, for it was incredible that beings of the type of the metallic ape-man who occupied the next cell to his should have intelligence enough to operate such obviously highly-developed machinery.

But what next? He pondered the question as the car deposited him in his cell. Obviously, he was being kept a prisoner. He didn't like it, however comfortable the imprisonment.

The first thing that suggested itself was a closer inspection of his cell. The lectern yielded an oil-ball like that the ape-man had given him and another, similar device, containing grease. There were various tools of uncertain purpose and in the last drawer he examined a complete duplicate set of wrist and finger joints. The larger cupboard had deep drawers, mostly empty, though one of them contained a number of books, apparently selected at random from a good-sized library—"Mystery of Oldmixon Hall," "Report of the Smithsonian Institution, 1903," "The Poems of Jerusha G. White"—a depressing collection.

This seemed to exhaust the possibilities of the cell and Sherman looked about for further amusement. His ape neighbor had pressed himself close to the bars on that side, indicating his interest in what Sherman was doing by chuckling bubbles of amusement. Further down the line one of the ape-men was holding the pair of handles that projected from the wall beside his cabinet. Sherman grasped his also; there was a pleasant little electric shock and in the center of the wall before him a slide moved back to disclose a circle of melting light that changed color and form in pleasing variations. The sensation was enormously invigorating and it struck the aviator with surprise that this must be the way these creatures . . . "These creatures!" he thought, "I'm one of them." . . . the way these creatures acquired nourishment. The thought gave him an inspiration.

"Hey!" he called in a voice loud enough to carry

throughout the room. "Is there anyone here that can understand what I'm saying?"

There was a clank of metal as faces turned in his direction all down the line of cages. "Yes, I guess so," called a voice from about thirty feet away. "What do you want to say?"

Sherman felt an overwhelming sense of relief. He would not have believed it possible to be so delighted with a human voice. "Who's got us here and why are they keeping us here?" he shouted back.

A moment's silence. Then—"Near's I can make out it's a passel of elephants and they've got us here to work."

"What?" Sherman shouted back, not sure he had heard aright.

"Work!" came the answer. "Make you punch the holes on these goddam light machines. It wears your fingers off and you have to screw new ones in at night."

He was rewarded by a tearing pain in his fingertip. Behind the ground glass a red light now appeared.

(Illustration by Paul)

"No, I mean about the elephants."

"That's what I said –elephants. They wear pants, and they're right smart, too."

Insoluble mystery. "Who are you?" called the aviator.

"Mellen. Harve Mellen. I had a farm right here where they set up this opry house of theirs."

Along the edge of Sherman's cell a blue light began to blink. He had an uncomfortable sensation of being watched. "Is there any way of getting out of here?" he shouted to his unseen auditor.

"Ssah," answered the other. "Them blue lights mean they want you to shut up. You'll get a paste in the eye with the yaller lights if you don't."

So that was it! They were being held as the servants—slaves—of some unseen and powerful and very watchful intelligence. As for "elephants with pants" they might resemble that and they might not; it was entirely possible that the phrase represented merely a picturesque bit of metaphor on the part of the farmer.

Why it must be an actual invasion of the earth, as in H. G. Wells' "War of the Worlds," a book he had read in his youth. The comet could have been no comet then, and . . . Yet the whole thing—this transformation of himself into a metal machine, the crash of the Roamer and his subsequent bath in the painful red light. It was all too fantastic—then he remembered that one does not feel pain in dreams . . .

They were giving him books, food—if this electrical thing was indeed the food his new body required—little to do; keeping him a prisoner in a kind of poisoned paradise.

. . . At all events the locks on these bars should offer no great difficulty to a competent mechanic. He set himself to a further examination of the tools in the lectern.

THE main difficulty in the way of any plan of escape lay in his complete lack of both information and the means of obtaining it. The mechanical apemen were hopeless; they merely babbled incoherent syllables and seemed incapable of fixing their atten-

tion on any object for as long as five minutes. As for the New York farmer his cage was so far away that the conversation could be carried on only in shouts, and every shout brought a warning flicker of the blue lights. On the second day, out of curiosity, Sherman kept up the conversation after the blue lights went on. A vivid stream of yellow light promptly issued from one corner of the cage, striking him fully in the eyes, and apparently it was accompanied by some kind of a force-ray for he found himself stretched flat on the floor. After that he did not repeat the experiment.

The next question was that of the lock on the cell-bars. The closest inspection he could give did not reveal the joints; they were extraordinarily well fitted. On the other hand, he remembered that the arm of the truck had reached under one of the lower bars. Lying flat on his back, Sherman pulled himself along from bar to bar, inspecting each in turn. About midway along the front of the cell, he perceived a tiny orifice in the base of one bar—a mere pin-hole. Marvelling at the delicacy of the adjustment which could use so tiny a hole as a lock he sat down to consider the question.

He was completely naked and had nothing but the objects that had been placed in his cell by his jailers. However—

Among the assortment of tools in his bureau was a curve-bladed knife with the handle set parallel to the blade as though it were meant for chopping, and forming the wall of the same drawer was a strip of a material like emery cloth. After some experimenting he found a finger-hole which, when squeezed, caused this emery-cloth to revolve, giving a satisfactory abrasive.

Thus armed with a tool and a means of keeping an edge on it, he took one of the metal bands from the drawer that contained the duplicate set of hands and set to work on it . . .

Producing a needle that would penetrate the hole in the bars was all of three days' work, though he had no means of marking the time accurately. The metal band was pliable, light, and for all its pliability and lightness, incredibly hard. His tool would barely scratch it and required constant sharpenings. Moreover, he had little time to himself; his unseen scholar required constant lessons in English. But at last the task was done. Choosing a moment when one of the cages at his side was empty and the occupant of the other was busy over some silly sport of his own—tossing a ball from one hand to another—Sherman lay down on the floor, found the opening and drove his needle home. Nothing happened.

He surveyed the result with disappointment. It was disheartening, after so much labor to attain no result at all. But it occurred to him that perhaps he had not learned the whole secret of the arm, and the next time the car came down the corridor for him, he was lying on the floor, carefully watching the opening.

As he had originally surmised, a needle-like point was driven home. But he noted that on either side of the point the arm gripped the bar tightly, pressing it upward.

This presented another difficulty. He had only two hands; if one of them worked the needle he could grip the bar in only one place. But he remembered fortunately, that his toes had showed a remarkable power of prehension since the change that had made him into a machine.

He finally succeeded in bracing himself in a curiously twisted attitude and driving the needle home under the proper auspices. To his delight it worked—when the needle went in the bars opened in the proper place, swinging back into position automatically as the pressure was withdrawn.

With a new sense of freedom Sherman turned to the next step. This was obviously to find out more of the place in which he was confined and of tha possibilities of escape. It seemed difficult.

But even on this point he was not to be long without enlightenment. His unseen pupil in English was making most amazing progress. The white screen which was their means of communication now bore complicated messages about such subjects as what constituted philosophy. Sherman felt himself in contact with an exceptionally keen and active mind, though one to which the simplest earthly ideas were unfamiliar. There were queer misapprehensions—for instance, no process of explanation he could give seemed to make the unseen scholar understand the use and value of money, and they labored for a whole day over the words "president" and "political."

In technical matters it was otherwise; Sherman had barely to express the idea before the screen made it evident that the auditor had grasped its whole purport. When he wrote the word "atom" for instance, and tried to give a faint picture of the current theory of the atom, it was hardly a second before the screen flashed up with a series of diagrams and mathematical formulae, picturing and explaining atoms of different types.

After four weeks or more (as nearly as Sherman could estimate it in that nightless, sleepless place where time was an expression rather than a reality) the car that came for him one day discharged him into a room entirely different from the school-room. Like the school-room it was small, and some twenty feet across. Against the wall opposite the door stood a huge machine, the connections of which seemed to go back through the wall. Its vast complex of pulleys, valves and rods, conveyed no hint of its purpose, even to his mechanically-trained mind.

Across the front of it was a long, black board, four feet or more across and somewhat like the instrument board of an airplane in general character. At the top of this board was a band of ground glass, set off in divisions. Beneath this band a series of holes, each just large enough to admit a finger, and each marked off by a character of some kind though in no language Sherman had ever seen.

To complete the picture, one of the mechanical ape-men stood before the board as though expecting him. On the ape-man's head was a tight-fitting helmet, connecting with some part of the machine by a flexible tube. As Sherman entered the room the ape-man motioned him over to the board, pointed to the holes and in thick, but intelligible English, said "Watsch!" A flash of purple light appeared behind the first of the ground-glass screens. The ape-man promptly thrust his finger into the first of the holes. The light went out, and the ape-man turned to Sherman. "Do," he said. The light flashed on again, and Sherman, not unwilling to learn the purpose of the maneuver, did as his instructor had done.

He was rewarded by a tearing pain in the finger-tip and withdrew the member at once. Right at the end it had become slightly grey. The ape-man smiled. Behind the second ground-glass a red light now appeared and the ape-man thrust his finger into another of the apertures, indicating that Sherman should imitate him. This time the aviator was more cautious, but as he delayed the light winked angrily. Again he received

the jerk of pain in the finger-tip and withdrew it to find that the grey spot had spread.

When the third light flashed on he refused to copy the motion of his instructor. The light blinked at him insistently. He placed both hands behind his back and stepped away from the machine. The ape-man, looking at him with something like panic, beckoned him forward again. Sherman shook his head; the ape-man threw back his head and emitted a long, piercing howl. Almost immediately the door slid back and the car appeared. As Sherman stepped to its threshold, instead of admitting him, it thrust forth a gigantic folding claw which gripped him firmly around the waist and held him while a shaft of the painful yellow light was thrown into his eyes; then tossed him back on the floor and slammed shut vengefully.

Dazed by the light and the fall, Herbert Sherman rolled on the floor, thoughts of retaliation flashing through his head. But he was no fool, and before he had even picked himself up, he realized that his present cast was hopeless. Gritting his teeth, he set himself to follow the ape-man's instructions, looking him over carefully to recognize him again in case —.

The course of instruction was not particularly difficult to memorize. It seemed that for each color of light behind the ground-glass panels one must thrust a finger into a different one of the holes below; hold it there in spite of the pain, till the colored light went out, and then remove it. The process was very hard on the fingers, made of metal though they were. What was it the farmer had shouted down the hall? "Wears your fingers out?" Well, it did that, all right. After an hour or two of it, when he had learned to perform the various operations with mechanical precision and the tip of his index finger had already begun to scale off, the ape-man smiled at him, waved approval and reaching down beneath the black board, pulled out a drawer from which he extracted a finger-tip, made in the same metal as those he already bore, and proceded to show Sherman how to attach it.

As a mechanic, he watched the process with some interest. The "bone" of the finger, with its joint, screwed cunningly into the bone of the next joint below, the lower end of the screw being curiously cut away and having a tiny point of wire set in it. The muscular bands had loose ends that merely tucked in, but so well were they fashioned, that once in position, it was impossible to pull them out until the finger-tip had been unscrewed.

The instruction process over, he was returned to his cell, wondering what was to happen next. The poisoned paradise was becoming less of a paradise. He speculated on the possibility of wrecking the car that bore him from place to place, but finally decided that it could not be done without some heavy tool and was hardly worth the trouble in any case until he was more certain of getting away afterward.

CHAPTER XIII

The Lassan

WHEN the car next called for him, it took a much longer course; one steadily downward and around a good many curves as he could judge from the way in which it swayed and gained and lost speed. It was fully a twenty-minute ride, and when he stepped out it was not into a room of any kind, but in what appeared to be a tunnel cut in the living rock, at least six feet wide and fully twice as high. The rock on all sides had been beautifully smoothed by some unknown hand, except underfoot where it had been left rough enough to give a grip to the feet.

At his side were two of the ape-men who had been released from the car at the same time. The tunnel led them straight ahead for a distance, then dipped and turned to the right. As he rounded the corner he could see that it ended below and before him in some room where machinery whirred. The ape-men went straight on, looking neither to the right nor the left. As they reached the door that gave into the machine-room they encountered another ape-man wearing the same kind of helmet with its attached tube, as Sherman's instructor had worn. The ape-men who came with him stopped. The helmeted one looked at them stupidly for a moment and then, as though obeying some unspoken command, took one by the arm and led him across the room to the front of a machine and there thrust one of the ubiquitous helmets on his head.

The machine, as nearly as Sherman could make out, was a duplicate of that on which he had injured his fingers; as the helmet was buckled on the ape-man who stood before it he immediately began to watch the ground-glass panels and put his fingers in the holes below.

The process was repeated with the second ape-man, and then the sentinel returned to Sherman. Taking him by the arm, the mechanical beast led him past the row of machines (there seemed to be only four in the room) and to a door at one side, giving him a gentle push. It was the opening of another tunnel, down which Sherman walked for some forty or fifty yards before encountering a second door and a second helmeted ape-man sentry.

This one did exactly as the first had done. Stared at him for a moment, then took him by the arm and led him across the room to a machine, where it left him. Sherman perceived that he was supposed to care for it, and with a sigh, bent to his task.

It was some moments before the rapid flashing of lights gave him a respite. Then he had an opportunity to look about him and observed that, as in the other room, there were four machines. Two of them were untenanted, but at the one next to his, there was someone working. When he glanced again, he was sure it was a mechanized human like himself—and a girl!

"What is this place?" he asked, "and who are you?"

The other gave a covert glance over his shoulder at the sentry by the door.

"Sssh!" she said out of the corner of her mouth, "not so loud . . . I'm Marta Lami—and I think this place is hell!"

After a time they contrived a sort of conversation, a word at a time, with covert glances at the ape-man sentry. He looked at them suspiciously once or twice, but as he made no attempt to interfere they gained confidence.

"Who—is—keeping—us—here?" asked Sherman.

"Don't—know," she replied in the same manner. "Think—it's—the—elephants."

"What elephants?" he asked a word at a time. "I haven't seen any."

"You will. They come around and inspect what you're doing. Are you new here?"

"New at these machines. They had me teaching them to write English. This is my first day in here."

"This is my eightieth work-period. We lost track of the days."

"So did I. Where are we? Are there any other humans with you?"

"One in the cage across the corridor from me. Walter Stevens the Wall Street man."

"Have they got him on this job, too?"

"Yes."

Sherman could not avoid a snicker. Back in the days before the comet he had had Stevens as a passenger once, and a more difficult customer to satisfy, a more cocksure-of-his-own-importance man he had never seen. The thought of him burning his fingertips up in one of these machines gave him some amusement. But his next question was practical.

"Do you know what these machines are for?"

"Haven't the least idea; Stevens said they were for digging something. They had the helmets on him twice."

"What helmets?"

"Like the dopey at the door wears. The dopeys all have to wear them."

"Why?"

"Haven't got any brains, I guess. I had one on once when they were teaching me to do this. They tell you what to think."

"What do you mean?"

"You put the helmet on and it's like you're hypnotized. You can't think anything but what they want you to think."

Sherman shuddered slightly. So that was how the mechanical ape-men were controlled so perfectly!

"How did they get you?" asked the girl who had described herself as Marta Lami.

"In an airplane. I'm an aviator. They shot me down somewhere and when I came to, put me in one of those cages. How did you get here?"

"The birds, I was at West Point with Stevens and that old fool Vanderschoof. They started shooting at the birds and the birds just picked us up and flew away with us."

"Where were you after you came to? I mean after the comet."

"New York. Century Roof. I was dancing there before."

"You aren't Marta Lami, the dancer?"

"Sure. Who the hell do you think?"

HE TURNED and regarded her deliberately, careless of the aroused attention of the sentry. So this was the famous dancer who had blazed across two continents and three divorce suits—who had been proclaimed the most beautiful woman in the world in starring electric lights before an applauding Broadway; for whose performances speculators held tickets at prize-fight premiums! How little she resembled it now, a parody of the human form, working her fingers off as the slave of an alien and conquering race.

She asked the next question:

"Where have they got you?"

"I don't know. In a cage somewhere. The only people around there are like these mugs." He nodded toward the ape-man.

"I wonder how long they'll keep us at this."

"I wish I could tell you. How's chances of making a break?"

"Rotten. There was a guy at the next machine tried it three or four work-periods ago. He socked the dopey at the door."

"What happened?"

"They sent a machine down for him and gave him the yellow lights all over. It was fierce, you should have heard him scream."

"How far down are we, anyway?"

"You got me, boy friend. Sssh! Watch the dopey."

Sherman glanced over his shoulder to see the ape-man moving aside from the door and bent back to his work. Evidently something important was imminent, judging from the actions of the sentry and the energetic attention the ex-dancer was giving to her machine. He was not deceived. Down the passage came something moving; something flesh-like and smooth, of a pale, grey-blue, dead-fish color, like a dangling serpent, then a round bulging head and finally the full form of an elephant!

But such an elephant as mortal eye had never before seen. For it stood barely eight feet high and its legs were both longer and infinitely more slender and graceful than the legs of any earthly elephant. The ears were smaller, not loose flaps of skin, but possessed of definite form and pressed close to the head. The skull was enormous, bulging at the forehead, and wrinkled in the middle down over the large intelligent eyes in an expression permanently cross and dissatisfied. As for the trunk it reached nearly to the floor, longer and thinner in proportion than the trunk of an ordinary elephant, and at its tip divided into four finger-like projections set around the circle of the nostril.

Oddest of all, the elephant wore clothes! Or at least an outer garment, a kind of long cloak which appeared to be attached underneath its body and which covered every portion except the ankles. The feet also were covered. A kind of hood hung back from the head on that portion of the cloak which rested on the creature's back. But what chiefly aroused Sherman's sense of strangeness and loathing was that the naked skin, wherever exposed, was of that same poisonous, dead-fish blue.

For a moment the thing stood in the doorway, regarding them, swinging its long trunk around restlessly, as though it could tell something about them by its sense of smell. Then it advanced a step or two into the room, and placing its trunk close to Sherman's body, began to run over it, sniffing, a few inches away. He felt that he wanted to shriek, to turn and strike the thing, or to run, but a warning glance from the dancer kept him motionless.

Apparently satisfied with the result of its examination the elephant turned to go, stopping as it did so to unhook some projection on the ape-man's helmet and apply it to its ear. After listening for a moment, it put the end of the trunk to this projection, snorted into it, and went away with soundless steps.

For several minutes the two worked on in silence after this. Then:

"Well, now you seen him," said the dancer, in the same word-by-word fashion as before. "That was our boss."

"That—thing?" asked Sherman, incredulously.

"I'll tell the cockeyed world. Say, those babies know more than Einstein ever heard of. Try to get fresh with one of them and see."

"What do they do?"

"Shoot you with one of the light-guns. They carry little ones around with them. They melt you down wherever they hit you and you have to go to the operating room to have things put back and it hurts like hell."

"Oh, I must have been there after they brought me down in my plane. They did something to my back."

"Then you know, boy friend. After that they put the helmet on you and you have to tell 'em what you're thinking about. You can beat that game, though, if you're careful. All I'd give 'em was how good a couple of Scotch highballs would taste and it made monkeys of 'em."

It was all very strange and not a little bewildering. Intelligent elephants that controlled forces beyond the powers of men; who could place a helmet on your head and read your thoughts; who could repair the new me-

chanized human form after it had apparently suffered irreparable damage, and who treated men and women as lower animals. Their arrival must have been that of the comet.

HERBERT SHERMAN had read deeply enough, though not widely. He remembered some Englishman—Colvin—Kevin—Kelvin, that was it!—who had a theory that life had drifted to the earth from somewhere out in the void of space and time. Had these, too, drifted in, in the same way the ancestors of man had come, to set a period to the day of man's dominance over creation? A strange enough creation it was now, though, with its mechanical men and its animals turned to metal statues. He wondered what Noah would say, and giggled at the thought.

"What's the joke, boy friend?"

"Oh, nothing. I had an idea."

Their plight at the hands of these master-animals was bad, but it might be worse. At least he had a certain amount of freedom, he was stronger than he had ever before been in his life, and felt quite as intelligent. It would be strange if he could not accomplish something. . . . He fell to planning out ways of escaping and failed to notice the pain in his fingers in the intensity of his thoughts.

Everything seemed to show that the operation of most of these machines was predominantly electrical. It would be strange if the car that carried them to and fro was not, yes and by Jove, the helmets the ape-men wore. If he could short-circuit the works, or even a part of them. . . .

Apparently his new body was a good conductor and impervious to the injurious effects of the electric current. Short-circuit something, that was the idea, create a confusion—and trust to escaping in the midst of it? Perhaps—but at all events a good deal could be learned about these elephant-men and their methods by watching them in such an emergency. Their machinery was so efficient that a child could operate it; it was in a pinch that their real intelligence would show.

It struck him that it would do little good to escape unless he did learn something about these elephant-people, their mysterious light-guns, their vast city that they seemed to have hollowed out of the heart of the solid Catskill rock, their chemistry and metallurgy and methods of attack and defense. Otherwise escape would be a jumping from the frying-pan into the fire. There would be nothing for it but a desperate, harried existence, the existence of one of the lower animals faced by the insupportable competition of man.

Information! That was the first need. He must bend all his energies to the task of obtaining it.

"By the way, what do these eggs call themselves?" he asked.

"Lassans," said the dancer.

A light flickered along the corridor. The ape-man at the door came forward, touched him on the arm and led him to the passage where he caught the car back to his cage.

CHAPTER XIV

In the Passages

THE first thing to be done, Sherman decided, was to short-circuit the mind-reading helmet of the guard at the door, if it were possible. He was not certain that the thing was electrical, and ignorant of how the current was conveyed if it were. He realized that he was dealing with the products of an utterly alien form of mentality, one that might not produce its results in the same way as an earth-man would at all. But something had to be dared, and this seemed to offer the best opportunity.

If the thing were electrical, the current must come through the tube to the top of the head. On his second work-period he observed this tube with care. It ran through an aperture in the stone roof and was apparently provided with some spring device, for a considerable length of it reeled out when the ape-man wished to walk across the room, and was absorbed as he returned.

The tube seemed to be made of the rubber-like material that composed the floor of his cage. The simplest plan, of course, would be to bring his chopping-knife with him and when the ape-man paused before the wall, swing it up in a sweep, severing the tube. But this, he felt, was not to be recommended. It would not necessarily short-circuit the current and the damage would be too readily laid at his door. The desideratum was some damage that apparently accidental, would yet produce a good deal of uproar.

He talked it over with Marta Lami.

"I think you're bugs," she said frankly, "but anything for excitement. What do you want me to do about it?"

"Well, here's what I figured out," Sherman explained. "We both arrive about the same time. I'll bring my knife. When we come in you hang back a bit, and while you're doing it, I'll take a poke at that cable with the knife, not enough to cut it, but enough to damage it. Then about half-way through the work period, I'll turn around and say something to you. If I do it quick enough, I think the monk will start for me, and if the cable doesn't go then, I'll miss my guess."

The next period proved unsuitable; the dancer's car arrived considerably before Sherman's and the plan was dropped for the time, but on the following occasion, as Sherman came down the passage, he noticed Marta Lami just ahead of him. He hurried to catch up and she evidently understood, for she avoided the guard's outstretched hand and hung back a minute against the wall as Sherman came up behind. He made one quick motion; the cable sheared half-way through exposing two wires of bright metal.

As luck would have it, it proved unnecessary to put the second part of the plan into operation. For just as Sherman was nerving himself to swing round and attract the ape-man's attention, he heard the soft pad-pad of one of the approaching Lassans. The ape-man stepped back to clear the entrance as he had before, and as he did so, there was a trickle of sparks, a blinding flash, and the cable short-circuited.

The result was totally unexpected. From the great machine before Sherman there came an answering flash; the ground glass split across with a bang, there was a hissing sound and something blew up with a roar that rocked the underground chambers. . . .

Sherman came to himself flat on his back and with pieces of rock and the debris of the machine lying across his legs. He looked around; Marta Lami lay some little distance across the room, half covered with fallen rock, one arm flung across her eyes as though to protect them. Above, the solid granite looked as though a blasting charge had been fired in its midst. Sherman pulled himself to a sitting posture, and finding nothing damaged, stood upright. The machine, badly shattered, lay in fragments of bent rods, broken pulleys and wrecked cylinders all about him. In the place where it had stood was a long narrow opening, down at the end of which something irregular shut off a bright point of light. A blast of heat exuded from the place and a steady, deep-voiced roaring was audible. The ape-man guard was nowhere to be seen.

He bent to pick up the unconscious girl, wondering how one revived a mechanical woman, especially without water, but she solved the problem for him by opening her eyes and asking:

"Who touched off the pineapple, boy friend?"

"I did. Come out of it and tell me what we do next. Anything busted?"

"Only my head." She patted the mass of stiff wire. "Boy, am I glad I wore my hair long before they made a robot of me!" And with an effort she stood up, looked down the pit where the machine had been and said, "Say, let's get out of here. That don't look so good."

"All right," said Sherman, "which way? Wait till I get my knife."

"No, leave it," she said. "Those babies are nobody's saps. If they find it on you they'll know you shot the well. Come on, I think that thing is going to pop again."

(Illustration by Paul)

Half a dozen ape-men stood behind the benches of their masters apparently serving at this singular meal.

The roaring had increased in both volume and intensity, and the machine-room had become unbearably hot. They turned toward the door, but just at the entrance into the passage a pile of debris had descended, making egress impossible. Behind them the roaring increased still more. "Come on, boy friend," called the dancer, tearing at the rocks. "Get these out of the road unless you want to be stewed in your own juice."

Together they toiled over the blocks of granite, hurling them backward toward the wreck of the machine. One minute, two, three—the roaring behind them grew and spread, the heat became terrific.

"AH!" cried Marta Lami at last. A tiny opening at the top of the heap was before them. Sherman tugged at a rock—one more, and they would be through. But it was too big, would not budge.

"No, this one," shouted his companion and together they dragged at it. It gave—a cascade of smaller stones rolled down the heap to the floor. "You first," said Sherman and stood aside.

The dancer wriggled through and reached back a hand to pull him after. He dived, grunted, pushed—made it. As they turned to slide down the other side of the heap, he looked back. A little rivulet of something

white, hot and liquid was creeping through the ruins of the machine and into the room.

Up the passage, strewn with wreckage, but with no more blockades, into the upper machine room. The machines here also were deserted and from one of them issued a minor variation on the roaring sound they had heard in their own room. The guard was not on duty. They turned, sped up the next passage to the place where the cars ordinarily met them. The car-track was dark; by the illumination from the passage they could see the rail on which it ran, a foot or two down from the level of the passage, and about a foot broad—a single shining ribbon of metal. Sherman looked in one direction, then the other. Nothing. The roaring behind them continued.

"Drive on, kid," said Marta Lami. "The boojums are going to get us if we wait."

"Stop, look, listen, watch out for the cars," he quoted as they leaped down and both laughed.

The roadbed was as smooth as glass, the rail set flush with it. Judging that the best route was the one taking them upward Sherman turned to the right and they began climbing, hand in metal hand.

The track was on a curve as well as an ascent. After a few steps they were in complete darkness and could only feel their way along, running into the wall every few minutes. They climbed for what seemed hours. The tunnel continued dark, without branches, simply winding on and on. Finally, so quickly that Sherman missed his step, they reached a level place, rounded one more curve, and saw ahead of them a band of light across the track from some side-tunnel.

"Shall we try it?" he asked as they reached the opening.

"Might be another machine room," she said, "but let's go. This track is terrible. If I wasn't made of iron I'd have bruises all over."

He vaulted over the sill, reached down and hauled her after him. From behind them came the roar, sunk to a vague purring by the distance. They were in another granite-lined passage; one that went straight ahead for a few yards, then branched sharply. The right hand fork seemed to lead downward; automatically they took the other turn. A diffused radiance from somewhere high in the walls, as though the granite had been rendered transparent here and there, filled the whole place with shadowless light. For a time the passage ran level, then it climbed again, with another fork to the right, which dipped away from their level and which they again avoided. Of any other living being there was thus far no sign.

The passage began climbing again, in a tight spiral, this time.

"Good thing we're in training," remarked Marta Lami. "This is worse than the stairs in the Statue of Liberty."

"Oh, did you fall for climbing that, too?" asked Sherman.

"Sure. Publicity stunt about a year ago. Dumb bunny of a publicity man. Photographed on the old lady's spikes. Never will again."

The spiral ended, a side passage branched off. The dancer stopped.

"Sh," she said, "someone's coming. Duck in here." She seized Sherman's hand and led him into the side passage, down which they ran for a few feet, then paused to look back. Down the passage they had just vacated came a group of the ape-men, four or five of them, each carrying on his left arm a long, cylindrical shield like those one sees in pictures of Roman soldiers, and in his right hand some instrument that looked like a fire extinguisher with a long, flexible nozzle.

Each of the group wore one of the helmets and behind them, wearing a similar headgear to which all the tubes were connected from the ape-men's helmets came one of the Lassans. The group hurried past without a sideward glance, the metal feet of the ape-men ringing oddly loud on the granite of the echoing passage. After a minute Sherman and the dancer crept cautiously forward; the procession had gone straight on down. Very likely a wrecking crew.

Sherman and Marta sprinted up the passage in the direction from which the ape-men and their guide had come. The passage no longer rose with the same steepness, and as the ascent grew more gentle, the tunnel widened, with frequent side-passages to the right and branches leading down to the track at the left. Finally, after a sharp turn, it opened out into a big room, untenanted like all they had seen so far, filled with a complex maze of machinery, but machinery of a different character from that they had labored at. At the farther end of the room a door stood open. They dashed across it, plunged through—and found themselves in one of the enormous blue-domed halls, whose ceiling seemed to stretch miles above them.

IT MUST have been all of three hundred feet across, and there was no visible support for the ceiling. All about the place stood various objects and pieces of machinery, and figures moved dimly among the titanic apparatus at the far end. But what most attracted their attention was the huge object that stood right before them.

It looked like a metal fish on an enormous scale. Fully fifty feet long and twenty feet high, its immense proportions dwarfed everything about it, and its sides, of brilliantly polished metal, shone like a mirror. The tail came to a stubby point, from which projected a circle of four tubes; down the side was a rib which ended in a similar tube about half way, and at the nose-end of the mechanical fish was a ten-foot snout, not unlike an elephant's trunk in shape and apparently made of the same rubbery material which held the cables of the helmets.

Marta pulled Sherman down behind the thing, and they peered around the edge seeking for a means of egress from the room. The nearest was twenty or thirty feet away. Watching their opportunity, they chose a moment when they seemed least likely to attract attention and made a dive for it.

They found themselves in another passage, terminating in two doors.

"Which?" asked Sherman.

"Eeny-meeny," said Marta—"this one," and stepping boldly to the right hand door, pushed it open . . .

For a moment they could only gaze. The room they had entered was another and smaller blue-domed hall. Around its sides was a row of curious twisted benches of green material, each of which was now occupied by one of the Lassans, hood thrown back from head, and elephant-trunk thrust into a large pool of some viscous, green stuff with bright yellow flecks in it, in the center of the circle. Half a dozen helmeted ape-men stood behind the benches of their masters, apparently serving them at this singular meal.

As the two humans entered there was one of those silences which are pregnant with events. Then:

"Good evening, folks. How's the boy?" said Marta, and curtsied gracefully.

The sound of her words seemed to release the spell. With a bellow of rage the nearest Lassan leaped from his bench, fumbling at one of the pouches in his cloak.

"The light-gun!" thought Sherman and braced himself to spring, but another of the masters extended his trunk and detained the first one. There was a momentary babble of rumbling conversation, then one of the Lassans reached behind him, picked up a helmet and placed it on his head, and attaching a tube to one of the ape-men, rose.

The ape-man moved toward Marta and Sherman like a being in a dream. They turned to run, but the Lassan produced a light-gun with such evident intention of using it at the first motion that they paused.

"Looks like we're in for it," said the dancer. "Oh, well, lead on Napoleon. What do we care for expenses?"

Under the direction of the Lassan the ape-man took them each by an arm and led them back through the hall of the metal fish, down among the machines, where two or three others stared at them curiously or lifted inquisitive trunks in their direction. Then into another passage which had one of the inevitable car-tracks. Their Lassan conductor reached around the corner into the passage, applied his trunk briefly to something and a moment later one of the cars slid silently into position. The door opened.

"So long, old scout," said Marta Lami. "Even if I never see you again, we had a great time together."

"So long," replied Sherman, taking his place in the car. He felt a distinct pang at leaving this dancer—vulgar, no doubt, and flippant, but gay and debonair, and the best of companions.

The car did not take them far. It discharged Sherman in a little passage before a narrow door, which opened automatically to admit him to a small blue-domed room containing nothing but a seat, one of the benches on which he had seen the Lassans reclining and a mass of wires and tubes. There seemed nothing in particular to do. He was at liberty, save that the door closed firmly behind him, cutting off escape, and seeing that he was left alone, he seated himself and began to examine the machinery, most of which was attached to his chair.

CHAPTER XV

The Lassan Explains

BEFORE he had time to riddle out any of its secrets the door opened again and one of the Lassans came in—a distinctly different type than any he had hitherto seen. This one was smaller than most; his skin, where exposed, was covered by a tracery of fine wrinkles and his coloring was whiter than the rest. Little crowfeet stood around the corners of his eyes, giving him an expression that was singularly humorous. He approached Sherman on noiseless feet, moved his trunk up and down as though examining him and then, helmets, set it on Sherman's head, tightened a connec-producing from a pocket in his cloak one of the thought-tion or two with his trunk and placing a like device on his own head, settled himself on the twisted bench.

The ordeal of the helmet! "They make you think whatever they want you to; it's like being hypnotized," Marta Lami had said. He braced himself resolutely. This alien intelligence should not plumb his thoughts without a struggle. . . .

To his surprise, there seemed no attempt to force his mind. The thought leaped up, unbidden, "Why, this —this Lassan is friendly!" No definite image or plan or connection of ideas formed itself in his brain; he merely felt enormously soothed and strengthened. After all, he found himself arguing, nobody desired to hurt him; merely to discover what curious process of thought had led him to act as he had

"You are too intelligent, too high a type to have been put to work at the machines," came the unspoken thought of the Lassan. "We might better have put you at the controls of one of the fighting machines." (This thought caused a mental image of the giant silver fish he had seen in the hall of the dome to rise in his mind; he pictured himself as seated amid a mass of levers before a panel set with complex gauges.)

"It was a mistake," the thought he was receiving went on, "that you were sent there. The Alphen of the mental department, who had your case in charge should have known better. You earth-men make much better machines than the ones we brought with us. You do not even need the helmets in order to control. Some of you are even capable of understanding and operating the lights." (This, he explained afterward appeared not as a consecutive sentence in Sherman's mind, but as a succession of ideas, almost as though he were thinking them himself. With the word "lights" a complex picture presented itself, involving the light-guns and a large amount of other complex apparatus, whose exact uses he did not then or later understand, but which he felt he understood at the moment.)

"Now," the Lassan's thought went on, "I don't blame you for being frightened and trying to run away, but you know we are different and I don't quite understand what frightened you. You were working at a machine, were you not?" And as Sherman unconsciously thought of himself sticking his fingers in the apertures of the machines, "I thought so. What happened?"

Unbidden, the memory of the explosion came to him. Again he heard the Lassan's step in the corridor, saw the guard move aside, the sputter from the cable, and then the explosion; then his memory jumped to the moment of tugging at the stones with the roar and heat all round and the white-hot stream in pursuit.

A vague, but sympathetic thought reached him, followed by a question—"But what made that happen? You're intelligent, you understand these things, you are a mechanic—what made it happen?"

With a start of surprise Sherman realized that the Lassan had been leading him gently along from place to place—to trap him! He struggled desperately to keep the thought of the short-circuiting of the guard's helmet from his mind; struggled to think about anything else at all—thought of a plate of steaming corned beef and cabbage, of the multiplication table—5 x 5 = 25, all in neat rows of figures, thought of how to control a plane that had gone into a tail-pin . . .

The pressure suddenly relaxed, the mind opposite his became friendly again; once more he received the vague intimation of sympathy and understanding, even of admiration of his mental strength.

"Why," the thought was telling him, "you have quite as much mentality as a Lassan! That is a very high compliment. I have never before met one of the lower animals who could withhold his thoughts from me. It is most extraordinary. Is it possible for you to withhold your thoughts from your own kind as well?"

Not at all difficult, thought Sherman, relaxing a bit; indeed the difficulty in human communication lies not in withholding thoughts but in expressing them.

His interlocutor went on, "Ah, but the feeling, the thought is generally understood, though it may not be clear. Tell me, have you never withheld a thought from someone who wished to know it?"

Yes, thought Sherman I have—and remembered the poker game at the Cleveland airport when he had drawn two cards and unexpectedly filled a straight flush to win the biggest pot of the evening from Barney's full house;

and of the time when he had thought of numerous unpleasant ways of slaying the mechanic who had left a leak in his oil-line and of the time when a girl had tried to gold-dig him and he had divined her intention first, and of the time when he had lifted the knife —!!!

Again that jar! He realized with a start that the Lassan having failed to pick his brain with friendliness, was trying to do it with flattery, and the realization so filled him with anger that he had no difficulty in resisting the pressure that was applied to make him tell, tell, tell what had happened in the machine-room at the end of the passage.

Once more the pressure relaxed. The Lassan was congratulating him again. "No, this is sincere this time and not flattery. You win. I shall not try to make you tell me again. We can probably obtain it from the other one anyway. Oh, man of a debased and alien race, I salute you. If your race were all like you we might breed them for intelligence and live in cooperation with you. It is almost a pity you had to be mechanized. If there is any information you wish, I will gladly exchange with you. We have seen your homes, we are curious—imagine living above the ground!—and from others of your race we know that you have many fine machines, almost a civilization, in fact. We would willingly know more of it and in return will tell you of our accomplishments."

COULD this offer conceal some new trap? Sherman wondered, but the Lassan divined this thought as soon as formed, and reassured him. "Since we now live here and since there are so few of your folk left it is important that we know about each other. We must live side by side—why not in friendship?"

The offer seemed fair enough. At all events if there were any injudicious questions he could turn them aside, and there was a good deal he wished to learn—about his mechanized body, about the purpose of those curious machines, the blue-domed halls, the silver fish, the interweavings of this underground city, where the Lassans had come from—he assented.

"Good," the message reached him. "Suppose you ask a question and then I will. What do you wish to know?"

"How I was made into a machine."

"I do not know that I can explain it to you. I perceive your knowledge of the nature of light is elementary. . . . But the material with which we surrounded the space-ship in which we came, in order to protect it from the radiation of suns unknown to you, has a powerful action on all animal substances. It is a material not unlike your radium, but a thousand times more powerful. When we reached your planet, your atmosphere carried it to every part of the earth, and all living things received it. Those who were most affected by it were turned to metal which retained that quality called 'life' within its interior reaches; the others became merely solid metal.

"Our birds are under instructions to bring us all such individuals as possess life. In our laboratories we make their forms over, so they will be useful to us as servants. Those who have become solid, of course, nothing can be done for. We have found in the past that when we take a new planet and make the individuals over into machines, unless we return them to familiar surroundings, they lose their brains when they reawake. Therefore you woke in the same place in which you passed from consciousness."

"Wonderful," said Sherman, "and where do you come from and how did you get here?"

He felt the Lassan's amusement. "That is two questions you have asked, and not one. Nevertheless I will answer. We come from a planet of another star, very far away—I do not know how to express it to you. Your methods of measurement for these things are different from ours." In Sherman's mind appeared a picture of the night heavens with the tremendous ribbon of the Milky Way swinging across its center; his attention was directed to one star, a very bright one.

"Rigel!" his mind called, and the thought went on. He was suddenly transported to the neighborhood of the star, felt that it was ages ago, long before the earth had cooled, and saw that the star, then a sun like our own, was threatened by some enormous catastrophe, a titanic explosion. Abruptly the picture was wiped out and he beheld the comet, the great comet the earthly astronomers had watched for so long before it struck on that fateful night, and realized that it was no comet, but an interplanetary vehicle bound from the planet of Rigel to the earth.

"But how —?" he began to frame another question. The Lassan cut across it firmly. "It is my turn to seek information now. We are interested in the machine that brought you here—the bird machine. How does it operate?"

Sherman imagined himself in the airplane's seat, operating the controls and as well as he could to a strange type of mind, explained how they worked. "But what drives it?" insisted the Lassan. "I do not understand. No, not the queer thing at the front that turns round. We have that principle ourselves. But the thing that makes it turn."

For answer, Sherman tried to picture the interior of the engine and show the gasoline exploding and driving it. The mind opposite his became thoughtful at once, and then flashed a question. "Are there many—explosives—in this earth?"

Sherman pictured gunpowder, dynamite and all the others he could think of. He at once sensed that the Lassan was both astonished and troubled. Something like a mental curtain which he could not pierce, dropped between them. A moment later the elephant-man rose.

"That will be sufficient for the present," he flashed, and came forward to remove the helmet from Sherman's head.

A FEW moments later the door was swung open; Sherman saw that one of the cars was waiting for him with the word "EXIT" beckoning him on and he was soon back in his cage.

As nearly as he could judge time, he was left alone for quite twenty-four hours before being recalled for further questioning. As soon as he entered the interrogation room he perceived that something serious had engaged the attention of the Lassans. The seat was prepared for him as before, but instead of one of the twisted benches, there were now three. His acquaintance, the old Lassan, occupied the center one; on one side was a chubby elephant-man whose obesity gave a singularly infantile expression to his features and on the other a slender-limbed type, as though by contrast. All three had tubes connected to the helmet which was placed on his head, but he soon recognized that the older Lassan was the only one to ask questions.

"We wish to ask you about these explosives," came the message. "Are they all alike?"

"No," he answered instantly.

"What causes them to explode?"

"I am not a chemist. I don't know." The idea of chemistry was slightly unfamiliar to them; it was apparent from their thoughts that chemistry had never occurred to them as the subject of a special study. Then

came another question, "Are there many chemists?"

An idea struck Sherman. He closed his mind resolutely against the question and flashed back the message that he had come to learn as well as teach. He sensed a certain annoyance among the new auditors, but the old Lassan answered, "That is only just. What do you wish to know?"

"What the machines are for."

"In the center of this as of every other earth lies the substance of life, as it lies at the heart of every sun. The machines pierce to it and draw it up for our uses."

"What is this substance of life?"

"You would not understand if we told you. Sufficient that it is nothing known on the surface of your world. Your idea that most nearly approaches it is—" he paused for a moment, feeling about in Sherman's mind for the proper expression "—is pure light; light having material body and strength. Now let me ask—do you use explosives as we use the substance of life, to fight your enemies?"

"Yes."

"What weapons do you use them in?"

Sherman thought of a revolver and then of a cannon.

"And do these weapons act at a distance?"

"Yes. May I ask a question?"

"If it is a brief one. This interview is important to us."

"How many of your people are there on the earth?"

"It is inadvisable to answer that fully, but there are some hundreds. Now tell us, are there any of these weapons near this place?"

Sherman thought. West Point—Watervliet Arsenal—Iona Island, leaped into his mind. All three Lassans leaned back with a sigh of satisfaction and exchanged thoughts among themselves so rapidly that he could not follow the process. Then the two younger Lassans disconnected their helmets and the older one said,

"We are disposed to be generous to you, we will demonstrate one of our fighting machines to you if you will show us how to use these explosives."

There could be no particular harm in it, he argued to himself. The army was a thing of the past, and if there were other people out in the world, and he could take them a knowledge of the Lassan fighting machines it would be of as much value as any information he could give. He agreed.

The old Lassan rose. "You will retain your helmet. It is a rule that none of the lower races are allowed in the fighting machines without them, and you would be unable to control one without our help in any case."

The car carried them to the blue-domed hall where he and Marta Lami had hidden behind the shining fish. A little pang of loneliness leaped up in him at the sight; he wondered where she was and whether she had been sent back to the machines. "No," the Lassan's thought answered his, "the other servant has not been returned to the machines. Many of them are not working as a result of the recent trouble and the servant has been placed on other work instead. But I do not understand your idea that the other servant is somehow different from you."

"Do the Lassans, then, have no sex?" the thought raced through his brain.

"Sex? Oh, I understand. The difference between two of the lower soft races that makes reproduction possible. Our birds have it. No, we have abolished it of course, as all higher races have. Our young are produced artificially."

CHAPTER XVI

A Dash for Freedom

THEY stood before the big machine. "You must do exactly as I tell you," the Lassan informed him. "The machinery of this instrument is very delicate. First, to enter, you must reach up there, by that fin, and insert one of your fingers in the hole you will find."

As he did so Sherman saw a door, so closely fitted that when it closed there was no visible seam in the metal, swing back. They entered.

The interior of the machine was disappointingly smaller than its outside would have led one to expect. A narrow walk, railed on both sides, led down the center to the forward part. Along and slightly below this walk was a row of instrument boards not unlike those of the mining machine, and at each of these one of the ape-men lay, helmet on head, apparently asleep. "No, not asleep," the Lassan told him, "they do not require it, like all your mechanical servants. They have merely been thrown into a state of nothingness till we need them."

At the prow of the machine the cat-walk widened into a control chamber. One of the Lassan couches was here and above it dangled a helmet which was connected with those of the slumbering ape-men. The Lassan removed the helmet he wore and exchanged it for this. Before this was another seat in which Sherman took his position. A complex of controls surrounded him, most of them with the fingerholes which were the ordinary Lassan method of handling machinery. Directly in front of this seat was a ground-glass panel, now dark but which lit up as soon as the Lassan had connected up his helmet, to give an accurate picture of the hall in which the fighting machine stood.

"And can you see to a distance?" Sherman wondered. The answer he received was either confused or beyond his comprehension. He gathered that the four-winged birds of the Lassans acted in some way or other as their scouts, remaining in a kind of telepathic communication with the Lassan in the fighting-machine they were assigned to help. . . .

Sherman was surprised to find how readily the enormous bulk and weight of the thing handled under the Lassan's skilled control. He understood, without definitely asking, that the power was furnished by that "substance of life" to which the Lassan had referred; in some way connected with the absolute destruction of matter. . . .

The door swung open before them, leading them down a passage that went up for some distance, then through an immense room where some twenty more of these giants lay stored, through it, and with surprising suddenness into the bright sunlight of a Catskill autumn day. As they emerged the viewing plate swung round to show them three of the big four-winged birds go whirring up from some unseen covert, spiral into the air above them and flying level with them, form an escort.

Like most mail aviators, Sherman held a commission in the Army Reserve and had been to West Point. It was not difficult for him to guide the great fighting machine there, to find a field gun and ammunition and load it into the fighting machine. He knew very little about artillery of any kind, but when they returned to the door of the Lassan city, he was enough of a mechanic to get the shell into the breech and find the firing mechanism. The gun went off with an ear-splitting crack and the shell whistled down the valley to burst against a green hillside where they saw a graceful pine dip and fall to the shock.

And just at that moment such a sense of disturbance and alarm invaded Sherman's mind as he had never felt before. He looked around; the group of Lassans who had poured out of the city to see the experiment with the gun was gathered in a tight knot, eagerly conversing with one another. The old Lassan who was conducting him turned round abruptly. "Into the fighting-machine at once," he commanded. "Our birds have sent a message that they are being attacked by some strange creature of your world."

As Sherman climbed through the door of the fighting machine he glanced over his shoulder to see, far down the valley a black speck against the sky. An airplane? he wondered and it suddenly occurred to him that however great his thirst for information, he should have kept his knowledge of guns from the Lassans; for if there were other people alive out there in the world the day might come when it would be a battle—and explosives were as new to the Lassans as the light-ray to the children of men.

AFTER that it became a struggle.

Sherman found he had to be constantly on his guard; constantly he had to conceal knowledge from the probing, insistent mind-helmets. The Lassans seemed interested in only one subject now: human methods of making war, human guns, human armor, human ships. Once they brought him an encyclopedia and as he held it on his lap went over every word of the articles on military subjects, questioning and cross-questioning him. Fortunately, it was an old encyclopedia, and he knew so little about it that in most cases he was able to throw open his mind and let his opponents see that it lay empty on these subjects. And still they were not satisfied.

Yet if he gave information, he also received it; for little by little an understanding of the subtle material they called pure light became part of his mental equipment. . . .

One day, as he returned from a long session in the questioning room and his cage clicked into position behind him, he was startled by a cheery, strident voice:

"Well, well, if it isn't my old pal, Herbie. How's the boy?"

Sherman looked around. In the next cage was Marta Lami, grinning and extending her hand through the bars.

"For Heaven's sake!" he said, and took the offered hand. "How did you get here?"

"How does anyone get anywhere around this place? In one of those patent Fords of theirs."

They gazed at each other for a moment, too glad of a familiar face to make the ordinary banal remarks. The dancer spoke first:

"Well, did they put the screws on you, big boy? They tried to pump me about that accident but all I'd think about was how good Broadway would look with all the lights, and they didn't make much out of me."

"I'll say they put the screws on me. They've had me in there every day since, trying to find out something about guns."

"Guns? What t'hell! Ain't they got that light-ray? They could give cards and spades to all the guns in the world with that. Wait a minute, though . . ." She thought for a moment. "Do you know, I think they're scared yellow about something and I'll bet a hundred dollars against a case of bathtub gin I know what it is."

"Yeh? Spring it. They keep pumping me and I'd like to know what it's all about."

The dancer glanced around. On the far side of her cage was an inattentive ape-man tossing his oil-ball about, across the corridor another. "Come over here," she said. "They haven't put me next to you for the fun of it, and they may have a dictaphone stuck around somewhere."

Obediently Sherman approached the bars of the cage.

"They put me to work making those fighting-machines," she whispered, "you know, those big shiny things like we hid behind that day we tried to make the break. They had the helmets on me most of the time because I didn't know how to use their tools and machines and I got a lot of what the guy that was running me was thinking about. He was damn nervous about something, and I think it was because there are some people outside going to take a whack at these babies."

"People like—us?" asked Sherman.

"I don't know. I didn't get it very good, but I think they're ordinary flesh-and-blood people. They came and got a lot of the dopeys from the room where I lived the other day and put them in one of the new fighting-machines and took it out. It never came back."

"Mmm," said Sherman, "do you s'pose that was because it got cracked up or because they took it somewhere else?"

"Dunno. But something's stirring."

If the Lassans had set a dictaphone or some similar device to spy on them there was no sign of it in the conversation which Sherman's interrogator held with him during the next period. But when he saw the dancer again, she beckoned him silently to her side, and producing from one of her drawers a book, began to trace letters on it with a fingernail dipped in grease.

"Be careful what you say," she wrote. *"They know what we're talking about. They pumped me."*

He nodded. "Well, kid" he said aloud. "What do you think? Will you ever make dancers of these Lassans?"

She giggled her appreciation of this remark for their unseen audience. "I'll say I won't. They're too slow on their pins. Rather sit still and suck up that green gooey than do anything. Cheez! What would I give for some good music."

"If I had a hand-organ now—" said Sherman. "We've got the monk." He nodded toward the ape-man, while with his own fingernail he wrote. *"How's chances of getting out of here? Do you know the way?"*

"I'll speak to one of the big shots tomorrow," she said aloud. "Maybe we can get him to let us run a show" On the book's flyleaf appeared the words. *"Only from the work-room on. It has an outside door."*

"How would I do as a dancing partner?" asked Sherman. *"Good,"* he wrote. *"I've doped out how to work these cars. Are you game for a try at it?"*

"You haven't got the figure," she said. "I'd rather dance with that old papa Lassan that does the questions." *"Sure,"* she wrote, *"any time you say."*

They broke off the conversation at this point, and Sherman set himself to study out a plan for escape. He had watched the cars intently both inside and out. The same needle arrangement that released the cage bars, apparently, actuated the mechanism of the car doors, and it was located inside. This meant that he could secure admission to the same car that carried the girl, and with luck, would be able to get out at the same time she did. What to do after that was a matter of chance and inspiration. If only he had a weapon! . . . The oil and grease balls. They would do to throw —might spoil a Lassan's aim or check the rush of one of the ape-man servants.

AS FINALLY arranged between them the plan was that he was to get in the same car she did. She would tap on the back of her compartment to assure him that everything was in order, and tap again when the door opened for her to get out. He would leave her a second to get her bearings, then they would make a rush of it. He weighed the usefulness of the knife as a weapon and discarded it—too clumsy for throwing and in a close struggle with one of the ape-men slaves, made of metal like himself, it would be quite useless. But another tool, rather like a short-handled and badly shaped hammer, he did take.

At last the hour arrived. The car ran down the line of cages, paused; opened before Marta Lami's. She smiled at him, nodded, and purposely delayed getting in. He fumbled desperately with his needle, fearing he could not make it, then it went home, the little arm at the bottom of the car swung out and its door opened. As he stepped in he heard the dancer's tap of encouragement from the compartment ahead.

Evidently it was some little distance to the work room. The car made several stops on the way, but Sherman, braced and ready, listened in vain for the tap that would tell him they had reached their destination. At last it came; two soft knocks. He bent, thrust home the needle. The door slid back, and he stepped out into one of the blue-domed rooms. His eyes caught a fantastic maze of machinery, helmeted ape-men busy at it and beyond them the huge forms of several uncompleted fighting machines.

The dancer gripped his hand. "This way," she said, pointing along the wall past the machines. "Take it easy; don't run till they notice us."

A feverish passion for activity burned in him. "Hurry, hurry," called every sense, but he fought it down and followed Marta Lami down the line of machines, past the impassive ape-men.

They made over half the distance to the door before they were spotted. Then one of the Lassans, who had sauntered over to the car stop, evidently expecting Marta, missed her and looked around. The first warning the two had was a sudden flickering of blue lights here and there among the machines. "Come on," shouted Marta. "There she goes!"

Sherman looked over his shoulder, saw the Lassan tugging at his pouch for a ray-gun, and paused to throw one of the oil-balls, straight and true, as one pitches a baseball. It struck the elephant-man squarely between the eyes, at the base of this trunk. He squealed with pain and fright and dropping the ray-gun, ran behind a machine. For a second all the eyes in the room turned toward him; then with another flickering of lights, the hunt was up.

Sherman saw a helmeted ape-man at a machine just ahead turn slowly round, gazing vacantly, and then fling himself at Marta. As she side-stepped to avoid his rush, Sherman swung his left from the heels. The metal fist took the slave flush on the jaw, and down he went with a crash. The dazzling spout of a ray-gun shot past them, spattering against the wall in a shower of stars, and they had reached the exit.

"Come, oh come!" shouted Marta, tugging at the heavy door. Sherman pulled with her, and at that moment another ray-gun flash struck it, just over their heads. The door gave suddenly; they tumbled through.

Into a gray twilight they struggled, shot with little dashes of rain that had beaten the valley to mud.

"Cheez!" said Marta, struggling through the gelatinous stuff. "If I live through this, I'll live to be a million."

"No, not that way," called Sherman. They'll look for us down the valley. Come on, up the hill."

He pulled her upward. They slipped, stumbled, slid, gripped the stump of a tree, then another. Below and behind them came a confused rumble and they heard the great door swing open again. A burst of light, like a star in the cloudy dark, broke out, and Sherman pulled the girl down behind the stump of a huge tree.

"What do you s'pose they'll bring after us?" he whispered, his lips close to her ear.

"Dunno. One of the little machines maybe. Look."

Sherman peered cautiously round his side of the stump. In the valley beneath them, shining brilliantly in the pure white light it had released, was one of the metal fish—but a smaller one than the usual fighting machine, and without the projecting trunk.

"We've been working on them for a while," the girl whispered. "I don't know what they're for, but they aren't fighting machines."

Remembering how the vision plate of the fighting machine he had controlled had reflected every object within range, Sherman made himself small behind the stump. The machine below was probably trying to locate them in the light it had released.

"Wonder they don't bring the birds out," he thought, and as if in answer to this idea, one of the four-winged creatures strutted around the machine, blinking in the light, then took off with a whir of wings, and spiralled upward. The light went out, reappeared as a beam, pointing down the valley and the machine moved off, slowly sweeping the sides of the hills with its pencil of illumination. He could see the multiple glow of the tubes at the stern, greenly phosphorescent, as the machine progressed. High above the bird screamed shrilly.

CHAPTER XVII

Marta's Sacrifice

PROGRESS up the hillside was slow. It had become completely dark; they were without any means of making a light and would not have dared to make one if they could. The mud was tenacious, the constant contact with stumps and rocks both irritating and difficult. But at last in their fumbling way, they reached a spot where the denudation gave place to a line of trees, looming dark and friendly overhead against the skyline, and after that they went faster. Where they were or what route to take neither had any idea. That portion of the Catskills is still as wild as in the days of the Iroquois, save for the few thin roads along the line of the valleys and these they dared not seek.

They solved the difficulty by keeping to the hill-crest till it ran out in a valley, then rapidly climbing the next hill and proceeding along that in the shelter of the forest. Though they necessarily went slowly they did not halt; neither felt the need of rest or sleep, their metal limbs took no serious bruises, and the slip of the hill kept them from running in circles as people usually do when lost in the woods.

Just as the eastern sky began to hold some faint promise of dawn they came upon a farmhouse in a clearing at the top of a hill. It was an unprepossessing affair with a sagging roof, but they burst in the door and went through it in the hope of finding weapons and perhaps an electric battery, for both were used to the bountiful electric meals of the Lassans and were beginning to feel the lack.

The best the place afforded, however, was a rather ancient axe, of which Sherman possessed himself, and a large pot of vaseline with which they anointed them-

selves liberally, for the continued damp was making them feel rusty in the joints.

They pressed on, and did not halt to consider the situation till full day had come.

"Where do we go from here?" asked Marta, perching herself on a tree-bole.

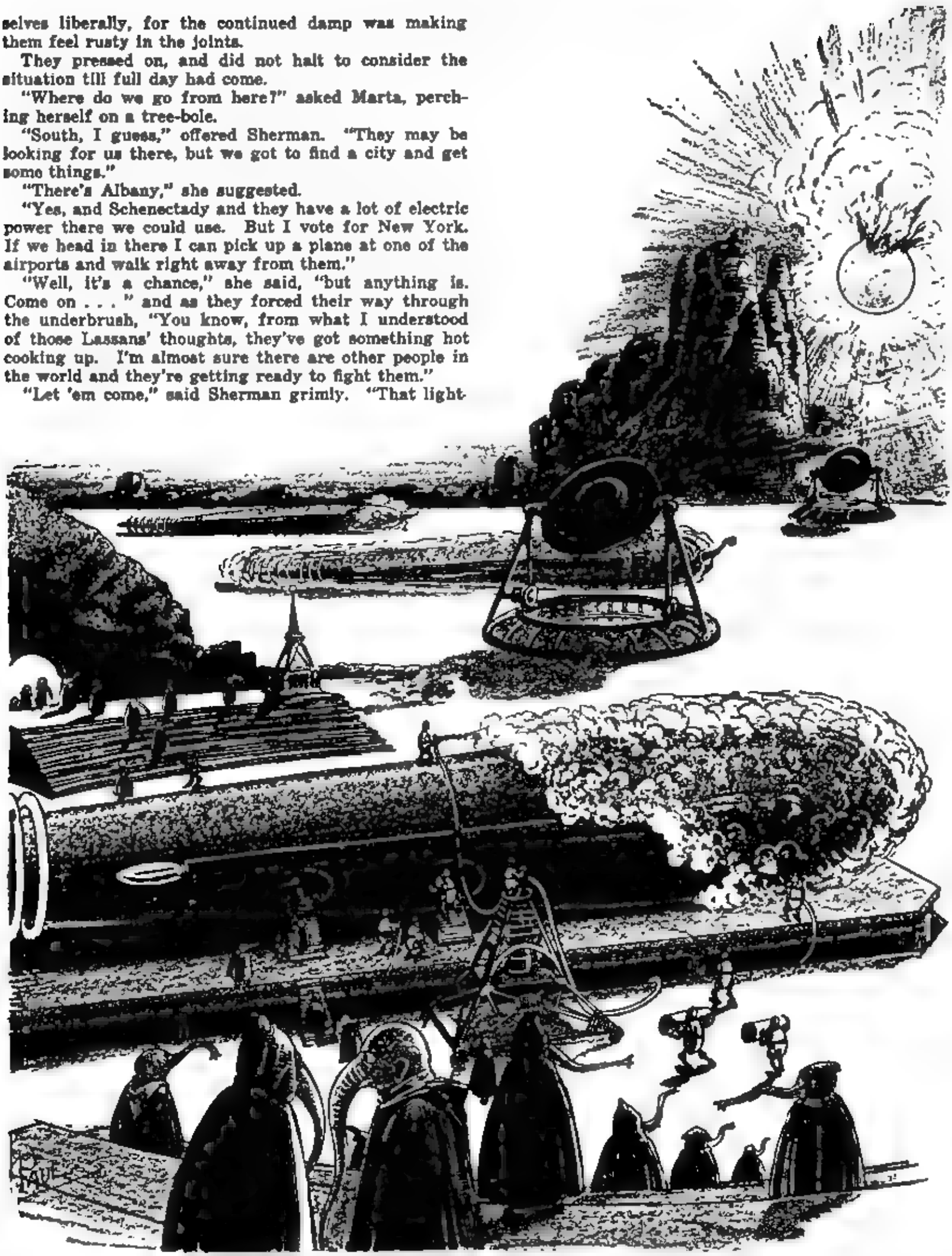
"South, I guess," offered Sherman. "They may be looking for us there, but we got to find a city and get some things."

"There's Albany," she suggested.

"Yes, and Schenectady and they have a lot of electric power there we could use. But I vote for New York. If we head in there I can pick up a plane at one of the airports and walk right away from them."

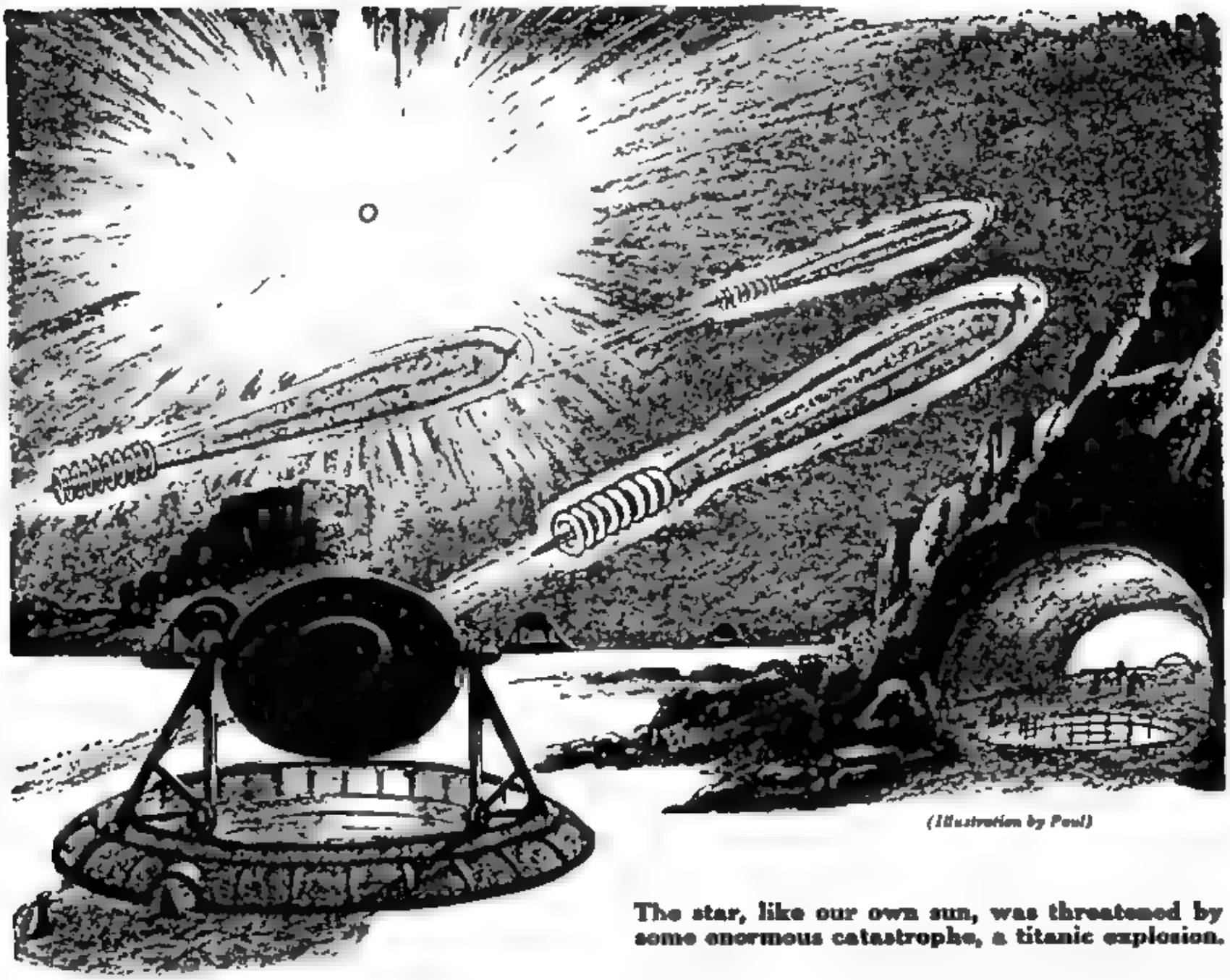
"Well, it's a chance," she said, "but anything is. Come on . . . " and as they forced their way through the underbrush, "You know, from what I understood of those Lassans' thoughts, they've got something hot cooking up. I'm almost sure there are other people in the world and they're getting ready to fight them."

"Let 'em come," said Sherman grimly. "That light-



ray won't stand the chance of a whistle in a whirlwind when they get after them with heavy artillery and airplane observation."

"That's just where you're all wet," replied the dancer. "They've been figuring on that for a long time. They got a gun from somewhere, and they've had all their fighting machines out, shooting it at them, and then armoring up the fighting machines to stand it. And



(Illustration by Paul)

The star, like our own sun, was threatened by some enormous catastrophe, a titanic explosion.

they're building guns of their own to shoot those light-bombs. I ought to know. I was on the job."

Sherman cursed himself inwardly. So that had been the result of his exchange of information with the old Lassan who was so anxious to know about guns.

"How do they get away from it?" he asked.

"Well, I don't know quite," she said. "I'm a sap about stuff like that. All I know is what the guy that was controlling me thought about and let me have without knowing it. But I got this much out of it—that the outside of these fighting machines is coated with this 'substance of life' they talk about some way, so it's a perfect mirror, and reflects everything that hits it, even shells. The coating reflects their light ray, too, but it has to have a lead backing for that. It's no good without the lead. Seems like lead will stop that light-ray every time."

"I wonder how about big guns," murmured Sherman.

"Don't know. I didn't get anything like that in what the boss was thinking. He seemed to imagine the gun he had was the biggest there was."

They toiled on. As they progressed southward the thinning forest and the increasing walls of the cliffs drove them farther and farther toward the river, till they were forced to take to the main road willy-nilly. Along it they could walk faster, but there was more danger. They watched the heavens narrowly for any sign of the four-winged birds, but the skies seemed deserted.

At Kingston they found a filling station, and kicking in the door, located a couple of storage batteries that supplied them with a needed meal. "What do you say to a car?" asked Sherman.

"Maybe yes, maybe no," said the dancer. "It's running a chance, isn't it? Still, we're getting nowhere awful fast this way. Let's try it."

Finding a car in running order was a procedure of some difficulty, and Kingston seemed a weaponless town, though Marta finally did locate one little pearl-handled .25 calibre pop-gun. Sherman eyed it dubiously.

"That's a good thing to kill mosquitoes with," he remarked, "but I don't think it will be much use for anything else."

"Boloney," she replied. "These Lassans are yellow from way back. If I stuck this under the nose of one of them he'd throw a fit. Come on. Let's go."

Eventlessly, the road flowed past under their wheels—Newburgh, Haverstraw, Nyack—one, two, three hours. Then, just south of Chester the dancer suddenly gripped Sherman's arm.

"What's that?" she said. "No, over there. Isn't it—?"

But in one swift glance he had seen as clearly as she. Like a living thing, the car swerved from the road, dived across the ditch, and losing speed, rolled to a halt on the green lawn of a suburban bungalow. Sherman leaped out. "Come on, for God's sake," he cried. "It's a fighting machine. If they've seen us they'll start shooting."

Dragging her after him, he dived around the house, through a seedy flower-garden, down a path. As though to lend emphasis to his words there came the familiar buzzing roar, and as Sherman dropped, pulling the girl flat on her face after him, they saw the wall of the bungalow cave in, and the roof tilt slowly over and drop into the burning mass beneath. A vivid blue beam, brighter than the sunlight of the dark day, swept across the sky, winked once or twice, and disappeared.

Marta would have risen, but "Take it easy," said Sherman. "If they see us they'll pop another of those tokens at us."

He wriggled along on his stomach, picking up weeds in his body plates in the process, and making for the shelter of an overgrown hedge that ran behind the next bungalow.

"Look out," called the dancer suddenly. "Here come the birds."

She waved her hand up and back, and by screwing up his eyes Sherman could just make out a black speck against the clouds, far north. They rolled under the shelter of the hedge and lay still, scarcely daring to whisper.

The Lassan in command of the fighting machine was evidently not satisfied that he had hit them with his hasty shot. Peering through the stems, they made out the shimmering form of the machine, sliding slowly past the burning house, its snout moving hither and thither questioningly. It passed through the garden, went on down the path. The bird swung to and fro overhead. Nearer. Evidently it had noticed the prints their feet left in the soft ground.

"Listen, partner," said Marta Lami, "get through and find some people, then come and get me out of that hell-hole up there. If they see me, they'll let you alone."

"No!" cried Sherman, but she was already running out across the field. The snout of the machine lifted toward her as though to deliver a blast, then rose and discharged another beam of blue light. Sherman heard one of the birds scream in answer, saw it sweep down on soaring pinions, and in a single motion snap the dancer up and away. The shimmering fighting machine swung round and turned back toward the road.

He lay still until he was sure it had gone, then, moving carefully for fear of the terror from the skies, crawled to the next bungalow. It yielded treasure-trove in the shape of a flashlight and a serviceable revolver, and securing a sheet from one of the beds to wrap around him as a loin-cloth, he set out to trudge to New York.

After a time it occurred to him that the disaster had taken place not because they were in a car, but because it had been driven unreasonably fast, and without precaution. He looked for and ultimately found another one, and keeping to the back streets and driving slowly, worked his way toward the city again. Then another idea came to him—Newark had an airport as well as New York and it was far nearer. He changed the direction of his advance, swinging west to avoid the long bridges over the Passaic River. Bridges were focal points; the birds would surely watch them, as intelligent as they were.

Late in the afternoon he spied one of them, far ahead and flying southward, but took no chances. He drew his car up to the side of the road and remained motionless for long after it had disappeared. When evening came on, he had already reached the outskirts of the city and could proceed without headlights.

Newark was a dead city, the diminished purr of the motor ringing curiously loud in the silent streets. Their complication bothered him; he was unfamiliar with the town and his flashlight gave out long before he reached his destination. But he kept steadily on, certain that the airport was somewhere at the south and east of the city. Toward the later evening a fine, cold rain began to fall, congealing to ice on the streets and on his metallic body.

The airport was just as he had remembered it on the first day of his awakening—it now seemed uncountable ages in the past. The little sports plane still stood on the platform, its torn wing dangling. The hangars were all locked; he was an inefficient burglar and spent an hour or two breaking one open and when he did, found nothing but a tri-motored monster quite beyond his powers to get out, and a rocket-plane requiring special fuel that he did not have. The next hangar yielded an autogiro and a training machine. He had no watch, but was sure that the night was passing fast, and not wishing to be abroad by daylight with an airplane, decided to chance it on the autogiro. Luckily she was full of fuel, and everything seemed tight. With some labor he removed the chocks and managed to wheel the machine out.

Not till he had it in the air did the thought of what direction he was to take occur to him. Boston—New York—Philadelphia—Chicago, he canvassed the possibilities. What was it Marta Lami had said—something about one of the fighting machines heading south? And he remembered how the astronomers had predicted that the comet would fall, probably, somewhere in New York State. If there were a borderline along which Lassans were meeting humans in any kind of conflict it was most likely to lie southward. With this thought in mind, he turned his plane to the south, and keeping the white line of foam along the coast beneath him as a guide, began to let her out.

The ceiling was low; between clouds and fitful squalls of rain flying was difficult and the weight of Sherman's mechanical body seemed to make the machine move loggily. It must have been all of an hour and three quarters later that he saw beneath him the tossing white-caps of Great Bay, with the ribbon of Wading River running back into the distance. Just beyond, he knew, lay Atlantic City. He was debating with himself whether to land on the beach there or hop across to the Philadelphia airport when, sharp and clear from somewhere ahead and below him, came the sound of gunfire. He tried for altitude, but only ran into clouds. Nevertheless the sound was unmistakable, and as he approached it became clearer and more pronounced, a long intermittent beat, heavy guns and light, mingled together, off to the right. There was fighting going on!

Exulting in his escape from the Lassans and in the fact that he could take their opponents information that would be of value, he swung the autogiro toward the sounds that became clearer every minute. He was getting right over them now, he thought; he could see red flashes along the horizon. Down there they were locked in battle—men and Lassans, his own people and the invaders from far-away Rigel.

Suddenly a beam of the light-ray leaped from the ground. Sherman thought it was directed at him; tried to loop the plane and cursed as he remembered autogiros wouldn't loop; then saw that the light was after all, not turned in his direction, but at some object on the ground. He banked the plane over and swung lower. Undoubtedly a Lassan fighting machine—and the beam was hitting things, things large and solid, for they collapsed under the stabbing ray. A red flame rose over the wreck; the roar of an explosion reached his ears. The battle-line!

He soared again. He must reach the headquarters of

whatever men were down there. The information he could bring and that Marta Lami had given him might make all the difference between the loss of the world and its salvation " . . . perfect mirror—reflects everything that hits it, even shells, but they don't know about the big ones. . . . The lead will reflect their light-rays, too . . . no good against lead. Their armor is made of the same stuff. . . . "

In the darkness beneath him troops were moving. He could catch glimpses of dark masses on the roads. Somewhere down there he distinctly heard the call of one of the four-winged birds, quite near. Then with a rush, it was suddenly upon him. He set the automatic pilot, and drew his revolver, but the bird, unfamiliar with the machine it was attacking, had dashed recklessly in. There was a rending screech as it came into contact with the wings of the autogiro; Sherman got in one shot, and then bird, man and plane tumbled toward the earth.

CHAPTER XVIII

The End of the Light-Ray

"THE Lassans?" said General Grierson, in a puzzled tone, looking at the sheet-clad apparition. "You mean these—mechanical monsters?"

Sherman winced. "Like myself? No, sir, those are their slaves. I thought you were familiar with them. They are elephant-men and quite different."

"I meant those damned, long, shining objects that shoot that light-ray of theirs. Their guns shoot it out in packages, but we can understand that and deal with them; our artillery is just as good. But if we can't stop those shining things there will be no army left and that means no men left on this planet. This army is our last resource. If you know of anything, anything, that will stop them, for God's sake tell us! All we've found that does any good so far are the twelve-inch railroad guns and we have only four of them. One was knocked out by their shells this afternoon."

"You mean their fighting machines," Sherman replied. "Why, I'm not absolutely certain. I only know what I picked up from them and what Marta Lami"—he swallowed hard at the mention of her name—"the bravest woman in the world, told me. But I think that a shell with a lead cap would go through those fighting machines like a knife through a piece of cheese."

There was a tiny silence in the room at this momentous announcement. Then an artillery officer said, dreamily, "The armor-piercing shells the railroad guns use have lead caps."

As though his words had released a spell there came a quick drumfire of questions:

"What are they armored with?"

"What kind of a power-plant do they use?"

"Can you stop the light-ray?"

"What makes you think so?"

Sherman smiled. "Just a moment. One question at a time. I'm not sure I can answer them all, anyway. As to what makes me think so and what they're armored with, they have a coating of steel armor, but it isn't very thick. It's plated on the outside with a coat of lead and outside that with the substance they call 'pure light.' I don't know what it is, but it's the same stuff they use in the light-ray and in their shells, and I know that lead sheeting will stop it, even when the lead is very thin."

General Grierson swung round in his chair. "Hartnett! write out an order to General Hudson, Chief Quartermaster, at once. Tell him to remove every piece of lead he can find in Atlantic City and get it melted down. Also to set up a plant for tipping all shells with lead. . . . "

Ben Ruby leaned forward. "Can we get into their city, their headquarters, or whatever they call it?"

"My God, I hope so!" cried Sherman. "Marta Lami's in there."

"All right, young man, you'll have your chance for that," said General Grierson. "Now suppose you tell us as much as you know about these—things. Every bit of information we can get will be valuable. . . . Oh, by the way, Hartnett. Have an order made out to the infantry to cut the points of their bullets with their knives. That will make them dum-dum and bring the lead out. Also another one to evacuate as much infantry as possible. They aren't going to be a great deal of use. . . . "

. . . .

In the factory of the Atlantic City Packing Company men were toiling, stripped to the waist, in an inferno of heat. The huge row of vats that had once held clams, oysters and fish to grace a nation's palate, now simmered with green-phosphorescent kettles of molten lead; the hand trucks that once bore piles of canned goods to and fro now pushed by blue-faced men in khaki, held long stacks of pointed shells. In at one end of the building they came in ceaseless procession to pause before the lead tanks where the workmen took each shell and dipped its tip briefly in the lead, then returned it to the truck. Out the other end they wheeled to be loaded in trucks, buses, limousines, everything that had wheels and would move, to be rushed to the maw of the ceaselessly crying guns.

For the offensive was on—the advance of the Lassans had been turned to a retreat. Along the water's edge, with its back to the sea and the steamers ready to pick up the survivors of the defeat of the last army of man, the last army of man had rallied; rallied and stood as the new lead-tipped shells began to come in and the artillery spouted them at the Lassan fighting-machines, no longer invincible, invulnerable monsters, but hittable and smashable pieces of mechanism.

It was Ben Ruby in a tank shining dully with the new lead plating who led the charge against the Lassan fighting machines on the first day of the battle, and who, with his little division of American tanks, had encountered three of the huge Lassan monsters outside the city. For a moment, as though dazed by the audacity of this attack, they had done nothing at all. Then all three had turned the light-rays on him. Would it hold?

The deadly rays glanced off, danced to the zenith in a shower of coruscating sparks and the gun of the American tank spoke—once, twice. A round hole, with a radiating star-pattern running out from it, appeared in the nose of the nearest Lassan fighting-machine, and it sank to the earth like a tired animal, rolling over and over, helpless. The other two turned to flee, swinging their long bodies around. Surrounded by shell-bursts, riddled by the lead-tipped weapons they too, struggled and sank, to rise no more.

AFTER that there had been losses, of course. The Lassan shells occasionally burst in the back areas and claimed a toll. But the advance had gone on steadily for a whole day, unchecked; the Lassans were driven back.

And then, as suddenly as they had come, they disappeared. South African aerial scouts, far ahead of the army, reported there was no sign of the enemy in the whole of New Jersey. The dodos vanished from the skies, the fighting machines from the earth. The Lassans seemed to have abandoned the struggle and retired to their underground city to wait for the end.

"Frankly," said Sherman, "I don't like it. Those johnnies are too smart to give up like that. I'll bet you

a thousand dollars against a lead bullet that they've gone back there to figure out some surprise for us, and when it comes it's going to be a beaner. Those babies may be elephants to the eye, but there's nothing slow about their brains."

"General Grierson doesn't think so," said Ben Ruby. "He's all ready to hang out the flags and call it a day. He sent home two more divisions of infantry yesterday."

"General Grierson hasn't got the finest girl in the world locked up in that hole under the Catskills, burning her fingers off," said Sherman with a set face. "Say, those babies aren't licked by a million miles. Their guns are just as good as ours and that light stuff they put in them is worse than powder when it goes off. They just didn't have as many guns. I'm taking even money that when they come out again, they'll have something that will make our artillery look sick."

They stood on a street-corner in Philadelphia, the new headquarters of the army of the federated governments.

"Yes, but what are we going to do about it?" asked Ben.

"A lot. For one thing we might go up there and try to bust in, but I don't think that would be very hot. They'll be expecting it. What we can do though, is get General Grierson to give us one of the laboratories here in town and some men to help us, and dope out a few little presents on our side of the fence. I learned plenty through those thought helmets of theirs while I was in that place, though I didn't realize I was getting a lot of it at the time. Those helmets work both ways, you know, and they couldn't keep me from picking up some of their stuff, especially as they were so anxious to find out what I knew they didn't watch themselves."

"Nice idea," said Ben. "I know a little about chemistry and between us we might put over something good. Let's Go."

An hour later, they were installed in their own experimental laboratory, just off Market Street, with enough assistants to help them with routine work and Gloria Rutherford and Murray Lee to keep them amused.

"All right, chief," said Ben, when they were installed. "What do we do first?"

"Figure out some kind of armor that will stand off whatever kind of ray they pop up with, I guess," offered Sherman.

"May I stick my two cents in?" said Murray Lee. "I don't think that any kind of armor is going to do a lot of good. For one thing, you don't know what the Lassans are going to produce. Those tanks we had were armored against the best kind of shells, and the Lassans turned up with the light-ray that made them look like Swiss cheese. It's your show, but if I were fishing for something, it would be a way to sock those guys. In this kind of war, the man that gets in the first punch is going to beat."

"That light-ray of theirs is pretty good," said Ben. "From what you know about it already, you ought to be able to dope out a pretty good heat ray."

"No soap," said Sherman. "Too slow. They'll be all set for that, anyway. It's right along the line they think. No, what we've got to have is something along a new line, and I'm thinking it can't be anything like a gun, either. They're onto that now." He closed the door to the inner office with a bang.

"By the way," asked Gloria, "why don't the Australians send some airplanes up there to the Catskills and shoot up the Lassan headquarters?"

"Didn't you know?" asked Ben. "They tried it. They dumped about a hundred tons of explosives all over the joint, and it might have been so much mud for all the good it did. Then they ran a railroad gun up there and tried to shell the door, but that wasn't any good, either. They've got a signal station up there watching, waiting for them to come out, and we'll just have to wait for that. Sherman"—he indicated the door behind which the aviator had retired—"is nearly bughouse. They've got his girl a prisoner in there."

"Tough break," commented Gloria. "Wish I could do something for the lady."

They talked about minor matters for a time, Ben speaking absently and cudgeling his brains for a line on which to work toward the new weapon. It is not easy to sit down and plan out a new invention without anything to start on beyond the desire to have it.

Suddenly, the inner door was flung open. In the aperture they saw Sherman, his face grinning, a small piece of metal in his hand.

"I've got it, folks!" he cried. "A gravity beam!"

CHAPTER XIX

The Gravity Beam

"A GRAVITY beam!" they ejaculated together in tones varying from incredulity to simple puzzlement. "What's that?"

"Well, it'll take quite a bit of explaining, but I'll drop out the technical part of it. . . . You see, it's like this—You remember old man Einstein, the frizzy-hair Frisian, demonstrated that magnetism and gravity are the same thing down underneath? And that some of the astronomers and physicists have said that both magnetism and light are the same thing? That is, forms of vibration. Well, one of the things I picked up from the lads in this Lassan city was that light, matter, electricity, gravitation, magnetism and the whole works, are the same thing in different forms.

"They've just jumped one step beyond Einstein. Now, they've got a way of producing, or mining, pure light, that is, pure matter in its simplest form. When it's released from pressure it becomes material and raises hell all over the shop. How they get the squeeze on it, I can't say. Anyway, it isn't important."

"Very interesting lecture—very," commented Gloria, gravely.

"You pipe down and listen to your betters till they get through," Sherman went on. "Children should be seen, not heard. But what I've got here is a piece of permalloy. Under certain magnetic conditions it defies gravity. Now if we can screen gravity that way, why can't we concentrate it, too?"

"Why not? Except that nobody ever did it and nobody knows how," said Ben Ruby.

"Well, here's the catch. We can do anything we want to with gravity if we go about it right. What is it in chemical atoms that has weight? It's the positive charge, isn't it? The nucleus. And it's balanced by the negative charges, the electrons, that revolve around it. Now if we can find a way to pull some of these negative charges loose from a certain number of atoms of a substance, there are going to be a whole lot of positive charges floating around without anything to bite on. And if we can shoot them at something, it's going to have more positive charges than it can stand. And when that happens, the something is going to get awful heavy, and there are going to be exchanges of negative charges among all the positive charges, and things are going to pop."

"Yes, yes," said Ben. "But what good does all this do? Give us the real dope on how you're going to do it."

"Well, with what I picked up from the Lassans, I

think I know. They know all about light and mechanics, but they're rotten chemists, and don't realize how good a thing they've got in lots of ways. Now look—if you throw a beam of radiations from a cathode tube into finely divided material you break up some of the atoms. Well, all we have to do is get an extra-powerful cathode tube, break up a lot of atoms, and then deliver the positive charges from them onto whatever we're going for. That would be your gravity beam."

"How are you going to get radiation powerful enough to split up enough atoms to do you any good?" inquired Ben.

"Easy. Use a radium cathode. The Lassans have the stuff, but never think of using it seriously. They think it's an amusing by-product in their pure light mines, and just play round with it. Nobody ever used it before on earth, because it was too expensive for such foolishness, but with so many less people around, we can get some without too much trouble, I guess."

"Mmm. Sounds possible," said Ben. "That is, in theory. I'd like to see it work in practice. How are you going to throw this beam?"

"Cinch. Down a beam of light. Light will conduct sound or radio waves even through a vacuum and this stuff I'm sending isn't so very different. Whatever we hit will act as an amplifier and spread the effect through the whole body."

"Boy, you want to be careful you don't blow up the earth," said Murray Lee. "Well, Gloria, I guess we're indicated to go out and dig up some radium. Let's fool them by going before they ask us. There ought to be a supply in some of the hospitals."

They rose and the other two plunged into an excited and highly technical discussion. When they returned, the workmen had already constructed a black box, not unlike an enormous camera in shape, in the center of the floor. At its back and attached to it, stood a stand fitted with a series of enormous clamps. Ben and Sherman were at a bench, working blowpipes, and shaping the delicate, iridescent glass of a long tube with a bulge at its center.

"Here you are," said Murray Lee. "I had to row with the Surgeon-General of the Dutch Colonial contingent to get this. He wanted to use it on some tuberculosis experiment. But I convinced him that he wouldn't be worrying about 't. b.' if the Lassans came out of their hole and stood the army on its head. How goes the job?"

"Swell," said Sherman. "Now you children run along and play. We're busy. We won't be finished with this thing before tomorrow afternoon, if then."

As a matter of fact it was the next evening before Murray and Gloria were summoned back to the laboratory. The device they had seen was now mounted on a stand of its own, with long ropes of electrical connections running back from it, and had been pushed back to the end of the room. Opposite it was another stand with a two-foot square piece of sheet iron resting on a chair in its center. The lens of the big camera was pointed in that direction.

"Now," said Sherman, "watch your uncle and see what happens."

HE TURNED a switch; the tube at the back of the apparatus lit up with a vivid violet glow and a low humming sound filled the room.

"I decided to use powdered lead in the box," he explained. "It is the heaviest metal there is available, and gives us the largest number of nuclei to project."

A second switch was thrown in and a beam of light leaped from the camera and struck in the center of the iron sheet, producing merely a mild white illumination.

"Poof!" said Gloria. "That isn't such a much. I could do that with a flashlight."

"Right you are. I haven't let her go yet. Hold your breath now."

He bent over, drove a plunger home. For just a second the only visible effect was a slight intensification of the beam of light. Then there was a report like a thunder-clap; a dazzling ball of fire appeared on the stand; a cloud of smoke, and Murray and Gloria found themselves sitting on the floor. The iron plate had completely vanished; so had the chair, all but two of its legs, which, lying in the center of the stand, were burning brightly. The acrid odor of nitrogen dioxide filled the room.

"Golly," said Ben Ruby, seizing a fire extinguisher from the wall and turning it on the blaze. "That's even more than we expected. Look, it made a hole right through the wall! We'll have to keep that thing tied up."

"I'll say you will," said Murray, helping Gloria up. "It's as bad for the guy that's using it as the one at the other end. But seriously, you've got something good there. What happened to the iron plate?"

"Disintegrated. Let's see, where does iron come in the periodic table, Ben? Twenty-six? Then you'll probably find small quantities of all the chemical elements from twenty-five down in that heap of ashes. Phooey, what a rotten smell! That must be the action of the beam on the nitrogen in the air."

"There's a lot to be worked out in this thing, yet, though," declared Ben, "and if you're right about the Lassans making a comeback, precious little time in which to work it out. For one thing, we've got to get a searchlight that will throw a narrow pencil of light for a long distance. I don't think those elephant-men are going to let us poke this thing under their noses. And for another we've got to dope out something to keep it in and some way to furnish current for it. . . . "

"Can't you work it from a tank?" asked Murray, "and rig up a friction accumulator to work from the tracks?"

"I can, but I don't like the idea," Sherman replied. "From the way those Lassans took to our airplanes, I could make a guess that when they come, they're going to come in some kind of flying machine. The dodos are no good in modern war. We'd never catch any kind of an airplane with a tank."

"How about an airplane for yourselves?"

"Too unsteady and too frail. I want something that will take a few pokes and not fold up."

"Say, you guys have less ingenuity for a couple of inventors than anyone I ever heard of," Gloria put in. "Why don't you get one of these Australian rocket-planes and fix it up. It's big enough to hold all your foolishness, and if this thing is half as powerful as it looks, you ought to be able to harness it some way for a power-plant. Then you can plaster your rocket all over with armor. I think—"

Sherman interrupted her by bringing his fist down on the table with a bang that made the glasses rattle.

"You've got it! By the nine gods of Clusium! With the punch this thing gives us used as a rocket, we'd have power enough to fly to the moon if we wanted to Why a rocket airplane at all? Why not a pure rocket? Let's go."

It was another week before workmen, even toiling with all the machine-shop facilities of Philadelphia at their disposal, and working day and night, could turn out the machine to Sherman's design, and it was two more before the apparatus was installed. The trial trip

was set for the early morning when there would be least chance of atmospheric disturbance.

The *Monitor* (she had been named for the famous fighting craft with which the American navy ushered in a new age in the history of war) now stood near the center of the flying field at the Philadelphia airport—a long, projectile-like vessel with gleaming metal sides, set with heavy windows, ten feet in diameter and nearly twice as long. At her stern a funnel-like opening led to the interior. This was the exhaust for the power-plant. At her bow the sharp nose was blunted off and its tip was occupied by the lens of a high-powered parabolic searchlight, slightly recessed, and with the discharge tubes for the atomic nuclei arranged around its edge so they would be thrown directly into the light-beam as soon as generated.

As the four approached her she had been placed on the ramp from which she was to start, slanting slightly upward, with a buffer of timber and earth behind it, to take up the enormous recoil her power plant was expected to develop.

"How do you get in?" asked Gloria, walking around the *Monitor* and discovering no sign of a door.

"Oh, that's a trick I borrowed from our friends the Lassans," explained Sherman. "Look here." He led her to a place half way along one side, where two almost imperceptible holes marred the shining brightness of the new vessel's sides. "Stick your fingers in."

SHE did as directed, pressed, and a wide door in the side of the projectile swung open. "Bright thought. No handles to break off."

They stepped in, bending their heads to avoid the low ceiling.

"She isn't as roomy or comfortable or as heavily armored as the one I mean to build later," explained Sherman, "but this is only an experimental craft, built in a hurry, so I had to take what I could get. . . . Now here, Murray you sit here. Your job is going to be to mind the gravity beam that furnishes us our power. Every time you get the signal from me, you throw this power switch. That will turn on all three switches at the stern, and shoot the gravity beam out for the exhaust. . . . You see, we can't expect to keep up a steady stream of explosions with this kind of a machine. We wouldn't be able to control it. We'll travel in a series of short hops through the air, soaring between hops, like a glider."

"How are you going to do any soaring without wings?" asked Murray.

"We have wings. They fold into the body at the back. I've made them automatic. When the power switch is thrown the wings fold in; after the explosion they come out automatically unless we disconnect them. If we want to really go fast, we'll disconnect them and go through the air like a projectile."

"Oh, I see. Will the windows stand the gaff?"

"I hope to tell you they will. I had them made of fused quartz, with an outer plating of leaded glass, just in case the Lassans try to get fresh with that light-ray of theirs.

"Now, Gloria, you sit here. You're the best shot in the crowd, and it's going to be your job to run that searchlight in the prow. As soon as you pick up anything with it, Ben will throw his switch, and whatever is at the end of it will get a dose of pure protons. We'll have to do a good deal of our aiming by turning the ship itself. I made the searchlight as flexible as I could, but I couldn't get a great deal of turn to it on account of the necessity of getting the nuclei into the light beam."

"By the way," asked Murray. "Won't this pure light armor of the Lassans knock your beam for a row of ashcans?"

"I should say not! If they use it, we've got 'em. That stuff has weight and the minute this beam of ours hits it, it will intensify the effect, and no matter how much pressure they have on it, it will blow up all over the place. . . . All set? Let's go. Throw in your switch, Murray."

Murray did as directed. There was a humming sound and the tiny beam of light leaped across the rear end of the ship and out the exhaust. Across it fell a thin powder of iron filings—the material that was to be decomposed to furnish the power.

Bang! With a roar, the *Monitor* leaped forward, throwing all of them back into their heavily padded seats, then dipped and soared as the wings came into play. The passengers glanced through the windows. Beneath them the outskirts of Philadelphia were already speeding by.

"Say," said Ben, "this is some bus. We must be making five hundred miles an hour."

"Sure," said Sherman. "We could do over seven hundred as a pure projectile, but we can't use that much speed and keep our maneuvering power."

CHAPTER XX

The Coming of the Green Globes

"WHERE to, folks?" asked Sherman, during one of their periods of soaring, as they floated high above the hilly country to the west of the Delaware River.

"Oh, most anywhere," said Ben. "I would like to see you try out this new-fangled gun of yours on something, though."

"What shall we try it on? A house?"

"No, that's too easy. We saw what it could do to things like that in the laboratory. Find a nice rock."

"O. K. Here goes. Don't give her the gun for a minute, Murray."

With wings extended, the *Monitor* spiralled down toward the crest of the mountain. A projecting cliff stood just beneath them, sharply outlined in the rays of the morning sun.

"Now this is going to be difficult," warned Sherman. "Throw that connecting bar, Ben. It holds the power switch and the beam switch together so they're both turned on at once. Otherwise the recoil we'd get on this end of the beam would tumble us over backward. Hold it, while I set the controls. We've got to take a jump as soon as we fire, or we'll pop right into the mess we make. . . . Ready? All right, Gloria, go ahead with your searchlight."

The beam of the searchlight shot out, pale in the daylight, wavered a second, then outlined the crest of the cliff.

"Shoot!" cried Sherman.

There was a terrific report; a shock; the *Monitor* leaped, quivering in every part, and as they spiralled down to see what damage they had done, they beheld no cliff at all, but a rounded cup at the tip of the mountain in which a mass of molten rock boiled and simmered.

"Fair enough," said Ben. "I guess that will do for the Lassans, all right. Home, James?"

"Right," answered Sherman. "We've found out all we want to know this trip."

The homeward journey was accomplished even more swiftly than the trip northward as Sherman gained in experience at the controls of the machine. As it glided slowly to earth at the airport a little group of

officers was waiting to meet them.

"What in thunder have you been doing?" one of them greeted the Americans. "Your static, or whatever it was you let loose, burned out all the tubes in half the army radio sets in New Jersey."

"By the nine gods of Clusium!" said Sherman. "I never thought of that. We're reducing matter pretty much to its lowest terms, and it's all a good deal alike on that scale—vibrations that may be electricity, magnetism, light or matter. Of course, when we let go that shot there was enough radiation to be picked up on Mars. I'll have to figure out a way to get around that. Those Lassans are no bums as electricians and after we've been at them once or twice, they'll be able to pick up our radiation whenever we're coming and duck us."

"There's another thing," said Ben. "I thought the *Monitor* vibrated a good deal when you let that shot go."

"It did. We'll have to get more rigidity or we'll be shaking ourselves to pieces every time we shoot. But this, as I said, is an experimental ship. What we've got to do now is turn in and build a real one, with heavy armor and a lot of new tricks."

"How are you going to know what kind of armor to put on her?"

"That's easy. Steel will keep out any kind of material projectiles they're likely to have, if it's thick enough. It won't keep out the light-ray, but we'll put on a thin lead plating to take care of that, just in case, though I don't think they're likely to try it after the one failure.

"Then inside the steel armor, we'll put a vacuum chamber. That will stop anything but light and maybe cosmic radiation, and I don't think they're up to that, although we'll get a little of the effect through the struts that support the outer wall of the chamber. What I would like though, is a couple of these Lassan thought-helmets. Not that you people are slow on the uptake, but we'd be a lot faster if we had them, and we're going to need all the speed we can get."

(Keystone Photos)

This shows that Mr. Pratt's conception of the elephant-men is not so far-fetched. This photo is Ganesha, a Hindu god, patron of art and literature. Ganesha symbolizes to the Hindus wisdom and knowledge.

They were crossing the flying field as they spoke, making for headquarters, where Sherman presently laid out the design for the second *Monitor*, embodying the improvements he had mentioned. The engineer who looked it over smiled doubtfully.

"I don't think we can give this to you in less than three or four weeks," he said. "It will take a lot of time to cast that armor you want and to build the vacuum chamber. I assume your own workmen are going to make the internal fixtures."

"Correct from the word go," Sherman told him. "But you better have it before three or four weeks are up. Ben, what do you say we run over to the lab and see if we can dig up something new."

IT WAS two days later when they stood at headquarters on the flying field again. The *Monitor* had made three more trips, on one of them, flying over the Lassan city without seeing anything more important than the Australian signal station perched on a nearby hill. Meanwhile the army of the federated governments had pushed out its tentacles, searching the barren waste that had been the most fruitful country in the world. East, west, south and north the report was the same; no sign of the Lassans or any other living thing.

"I could wish," said Gloria, "that those lads would stick their noses out. I'd like to try the *Monitor* on them."

"You'll get all you want of that," said Ben a trifle grimly. "I'm glad they're giving us this much of a break. It let's us get things organized. Sherman is monkeying with a light-power motor now. If he catches it, our troubles will be over."

"Wait a minute," called an officer at a desk, as a telegraph key began tapping. "This looks like something" He translated the dots and dashes for them. "Lassan—city—door—opening. . . . It's from the signal station on that mountain right over it. . . Big—ball coming out will -will—what's this? The message seems to end." He depressed the key vigorously and then waited. It remained silent.

"Oh, boy," said Sherman, "there she goes! They got that signal station, I'll bet a dollar to a ton of Lassan radiation."

The officer was hammering the key again. "We're sending out airplane scouts now," he said. "Too bad about the signal station, but that's war!"

"Come on, gang," said Ben. "Let's get out to the flying field. Looks like we're going to be in demand."

In a car borrowed from the headquarters staff they raced out to the field where the *Monitor* stood, ready on its ramp for any emergency. Just as they arrived an airplane became visible, approaching from the north. It circled the field almost as though the pilot were afraid to land, then dipped and came to a slow and

hesitating stop. The onlookers noticed that its guy wires were sagging, its wheels uneven; it looked like a wreck of a machine which had not been flown for ten years, after it had lain in some hangar where it received no attention at all.

As they ran across the field toward it, the pilot climbed slowly out. They noticed that his face was pale and horror-struck, his limbs shaking.

"All gone," he cried to the oncoming group.

"What? Who? What's the matter?"

"Everything. Guns. Tanks. Airplanes. The big ball's got 'em. Almost got—" and he collapsed in Ben's arms in a dead faint.

"Here," said Ben, handing the unconscious aviator to one of the Australian officers. "Come on. There's something doing up there. Big balls, eh? Well, we'll make footballs of 'em. That chap looks as though he'd been through a milling machine, though. The Lassans certainly must have something good."

With a shattering crash as Murray Lee gave her all the acceleration she would take, the *Monitor* left the ramp, soared once or twice to gain altitude, and headed north amid a chorus of explosions. In less than ten minutes the thickly-settled districts of northern New Jersey were flowing past beneath them.

"Wish we had some radio in this bus," remarked Ben Ruby. "We could keep in touch with what's going on."

"It would be convenient," said Sherman, "but you can't have everything. The Lassans aren't going to wait for us to work out all our problems. . . . Look—what's that over there?"

At nearly the same level as themselves and directly over the city of Newark a huge globular object, not unlike an enormous green cantaloupe, appeared to float in the air. From its under side the thin blue beam of some kind of ray reached to the ground. From the face turned diagonally away from them a paler, wider beam, yellowish in color, reached down toward the buildings of the city. And where it fell on them, they collapsed into shattering ruin; roof piled on walls, chimneys tumbled to the ground. There was no flame, no smoke, no sound—just that sinister monster moving slowly along, demolishing the city of Newark almost as though it were by an effort of thought.

"Hold tight, everybody," cried Sherman. "Going up."

The *Monitor* slanted skyward. Through the heavy quartz of her windows they could see a battery of field guns, cleverly concealed behind some trees in the outskirts of the city, open fire. At the first bursts the monster globe swung slowly round, the pale yellow ray cutting a swath of destruction as it moved. The shells of the second burst struck all around and on it. "Oh, good shooting," said Gloria, but even as she spoke the yellow ray bore down like a fate and the guns became silent.

"What have they got?" she shouted between the bursts of the *Monitor's* rocket motor.

"Don't know," replied Sherman, "but it's good. Ready? Here goes. Cut off, Murray."

From an altitude of 15,000 feet the *Monitor* swept down in a long curve. As she dived Gloria swung the searchlight beam toward the green globe.

"Go!" shouted Sherman, and Ben threw the switch. There was a terrific explosion, the *Monitor* pitched wildly, then, under control swung round and began to climb again. Through the thinning cloud of yellow smoke, they could see a long black scar across the globe's top, with lines running out from it, like the wrinkles on an old, old face.

"Damn!" said Sherman. "Only nicked him. They must have something good in the line of armor on that thing. Look how it stood up. Watch it, everybody, we're going to go again, Gloria!"

Again the searchlight beam swung out and down, sought the green monster. But this time the Lassan globe acted more quickly. The yellow ray lifted, probed for them, caught them in its beam. Instantly, the occupants of the *Monitor* felt a racking pain in every joint; the camera-boxes of the gravity-beam trembled in their racks, the windows, set in solid steel though they were, shook in their frames, the whole body of the rocket-ship seemed about to fall apart.

DESPERATELY Sherman strove with the controls; dived, dodged, then finally, with a raised hand to warn the rest, side-slipped and tumbled toward the earth, pulling out in a swinging curve with all power on—a curve that carried them a good ten miles away before the yellow ray could find them.

"Boy!" said Murray Lee, feeling of himself. "I feel as though every joint in my body were loose. What was that, anyway?"

"Infra-sound," replied Sherman. "You can't hear it, but it gets you just the same. Like a violinist and a glass. He can break it if he hits the right note. I told you those babies would get something hot. They must have found a way to turn tha' pure light of theirs into pure sound and vibrate it on every note of the scale all at once, beside a lot the scale never heard of. Well, now we know."

"And so do they," said Ben. "That boso isn't going to hang around and take another chance on getting mashed with our gravity beam. Even if we did only tip him, I'll bet we hurt him plenty."

"All I've got to say," replied Sherman, "is that I'm glad we're made of metal instead of flesh and blood. If that infra-sound ray had hit us before, we'd be mashed potatoes in that field down there. No wonder the signal station went out so quick."

"Do we go back and take another whack at them?" asked Murray Lee.

"I don't like to do it with this ship," Sherman replied. "If we had the *Monitor II* it would be easy. With that extra vacuum chamber around her, she'll take quite a lot of that infra-sound racket. Vacuum doesn't conduct sound you know, though we'd get some of it through the struts. But this one—. Still I suppose we'll have to show them we mean business."

The *Monitor* turned, pointed her lean prow back toward Newark, and bore down. In their flight from the infra-sound ray the Americans had dived behind a fluffy mass of low-hanging cloud; now they emerged from it, they could see the huge green ball, far up the river, retreating at its best speed.

"Aha," Sherman said. "He doesn't like gravity beams on the coco. Well, come on, giddyap horsey. Give her the gun, Murray."

Under the tremendous urge of the gravity-beam explosions at her tail, the *Monitor* shot skyward, leaving a trail of orange puffs in her wake as the beam decomposed the air where it struck it. Sherman lifted her behind the clouds, held the course for a moment, called "Ready, Gloria?" and then dropped.

Like a swooping hawk, the *Monitor* plunged from her hiding place. Sherman had guessed aright. The green ball was not five miles ahead of them, swinging over the summits of the Catskills to reach its home. As they plunged down the yellow ray came on, stabbed quickly, once, twice, thrice—caught them for a brief second of agonizing vibration, then lost them again as Sherman twisted the *Monitor* round. Then Gloria's beam struck

the huge globule fair and square, Ben Ruby threw the switch, and a terrific burst of orange flame swallowed the whole center of the Lassan monster.

Prepared though they were for the shock, the force of the explosion threw the ship out of control. It gyrated frantically, spinning up, down and sidewise, as Sherman worked the stick. The Catskills reared up at them; shot past in a whirl of greenery; then with a splash they struck the surface of the Hudson.

Fortunately, the *Monitor's* wings were extended, and took up most of the shock at the cost of being shattered against her sides. Through the beam-hole at the stern the water began to flow into the interior of the ship. "Give her the gun!" called Sherman frantically, working his useless controls. There was a report, a shock, a vivid cloud of steam, and dripping and coughing like a child that has swallowed water in haste, the *Monitor* rose from the stream, her broken wings trailing behind her.

"I don't know—whether—I can fly—this crate or not," said Sherman, trying to make what was left of the controls work. "Shoot, Murray—if we put on enough power—we won't have to soar." There was a renewed roar of explosions from the *Monitor*. Desperately, swinging in a wide curve that carried her miles out of her way, she turned her nose southwards.

"Make Philly," cried Sherman cryptically, above the sound of the explosions that were driving their craft through the air at over six hundred miles an hour. Almost as he said it, they saw the airport beneath them. The *Monitor* swerved erratically; the explosions ceased; she dived, plunged and slithered to a racking stop across the foreshore of the seaplane port, ending up with a crash against a float, and pitched all four occupants from their seats onto the floor.

"Well, that's one for you and one for me," said Sherman as he surveyed the wreckage ruefully. "We used up that green ball all right, but the old *Monitor* will never pop another one. Did anyone notice whether there were any pieces left, by the way?"

"I did," said Gloria. "As we came up out of the water I could see a few hunks lying around on the hill."

"Mmm," remarked Sherman, "they must be built pretty solid. Wish I knew what was in them; that's one thing I never did get through that thought-helmet. Probably something they just figured out. You gave her all the power we had, didn't you?"

"There's something else I'd like to know," said Ben. "And that's whether they had time to warn the rest of the Lassans what they were up against. If they did, we stand a chance. The way I have these guys figured is that they're good, but they have a yellow streak, or maybe they're just lazy, and they don't like to fight unless they're sure of winning. If I'm right we'll have time to get *Monitor II* into commission and before they come out again, we'll be ready for them. If I'm wrong we might as well find a nice hole somewhere and pull it in after us."

"Yes, and on the other hand, if they did have time to warn them, they'll sit down and dope out some new trick. Though I have a hunch they won't find an answer to that gravity-beam so easily. There isn't any that I know of."

"Well, anyway," said Murray Lee, "nothing to do till tomorrow. What are you two rummies up to now?"

"Run up and push them along on *Monitor II* if we can," replied Ben. "I think I'll round up the rest of the mechanical Americans and put you all to work on it. We can work day and night and get it done a lot quicker."

"Me," said Sherman, "I'm going to figure out some way to install radio on that new bus or bust a button. That's one thing we ought not to do without. If we'd known the position of that green lemon before we saw it, we could have dived out of the clouds on it and made it the first shot before we got all racked up with that yellow ray."

CHAPTER XXI

Reinforcements

THE little group separated, going about their several tasks. From whatever cause, Ben proved to be right about the Lassan green spheres. After that one brief incursion, in which they had wrecked the greater part of Newark and most of the artillery the Australians had established to bear on the door of the Lassan city, they seemed to have returned to their underground home, realizing that the earth-men still had weapons the equal of anything the creatures of Rigel could produce.

For a whole week there was no sign of them. Meanwhile, the federated army dug itself in and prepared for the attack that was now believed certain. The success of the first *Monitor* had been great enough, it was decided to warrant the construction of more than one of the second edition. General Grierson wished to turn the whole resource of the Allied armies to building an enormous number, but under Ben's persuasion he consented to concentrate on only five.

For, as Ben pointed out to the general, the training of flesh and blood men for these craft would be labor lost.

"They couldn't stand the acceleration that will be necessary, for one thing. With *Monitor II* we expect to be able to work up swiftly to over a thousand miles an hour, and the most acceleration a flesh and blood man can stand won't give us that speed quickly enough. Of course, we could make 'em so they worked up speed slowly, but then they wouldn't be able to cut down fast enough to maneuver. And for another thing this infra-sound ray the Lassans project would kill a flesh-and-blood man the first time it hit him. What we need for this kind of war, is supermen in the physical sense. I don't want to make any such snooty statement as that Americans are better than other people, but we happen to be the only ones who have undergone this mechanical operation and we're the only people in the world who can stand the gaff. You'll just have to let us make out the best we can. In fact, it might be better for you to re-embark the army and leave us to fight it out all alone. The more women we have here, the more we'll have to protect."

The general had been forced to agree to the first part of this statement, but he gallantly refused to abandon the Americans, though he did send away men, troops and guns which had become useless in this new brand of warfare. But he insisted on retaining a force to run the factories that supplied the Americans with their materials and on personally remaining with it.

Even as it stood, there were only fourteen of the mechanical Americans remaining—enough to man three of the Monitors.

But one day, as *Monitor II*, shining with newness, stood on her ramp having the searchlights installed, Herbert Sherman came dashing across the flying field, waving a sheet of paper.

"I've got it," he cried, "I've got it! I knew I got something from those Lassans about electricity that I hadn't known before, and now I know what it is. Look!"

"Radio?" queried Ben.

"No, read it," said Sherman. "Radio's out. But this is a thousand times better."

He extended the sheet to Ben, who examined the maze of figures gravely for a moment.

"Now suppose you interpret," he said. "I can't read Chinese."

"Sap. This is the formula for the electrical device I was talking about."

"Yeh. Well, go on, spill it."

"Well, I suppose I'll have to explain so even your limited intelligence will grasp the point. . . . In our black box, we've been breaking up the atoms of lead into positive and negative charges. We've been using the positive, and then just turning the negative loose. This thing will make use of both, and give us a swell new weapon all at once.

"Look—the negative charges will do for our gravity beam just as well as the positive. They will create an excess of negative electrons instead of an excess of positive protons in the object we hit, and cause atomic disintegration. It's a gravity process just the same, but a different one. Now that gives us something else to do with the positives.

"You know what a Leyden jar is? One of those things you charge with electricity, then you touch the tip, and bang, you get a shock. Well, this arrangement will make a super-Leyden jar of the *Monitor*. Every time she fires the gravity-beam, the positive charges will be put into her hull, and she'll soon be able to load up with a charge that will knock your eye out when it's let loose."

"How's that? I know the outside of the *Monitor* is covered with lead and so is the outside of a Leyden jar, but what's the connection?"

"Well, it's this way. When you load up a Leyden jar the charge is not located in the plating, but in the glass. Now the *Monitor* has a lot of steel, which will take up the charge just as well as glass. As soon as she fires the gravity-beam, these filaments will load her up with the left-over positives till she grunts. See?"

"And since the earth is building up a lot of negative potential all the time, all you have to do is get your bird between you and the earth and then let go at him?"

"That's the idea. It'll make an enormous spark gap, and whatever is between us and the earth will get the spark. Sock them with a flash of artificial lightning. We'll use the light-beam as a conductor just as with the gravity-beam."

"Sounds good, but I want to see the wheels go round. How much of a potential do you think you can build up in the *Monitor*?"

"Well, let's see. We've got two thicknesses of nine-inch steel . . . volts to a cubic inch . . . by cubic inches. . . . Holy smoke, look how this figures out—over eleven million volts! That's theory, of course. There'll be some leakage in practice and we won't have time to build up that much negative potential every time we shoot, but if we only do half that well, we'll have a pretty thorough-going charge of lightning . . . Peterson, come over here. I want you to make some changes on this barge."

MONITOR II stood on the ramp that had once held her elder sister, her outer coating of lead glimmering dully in the morning sun. Here and there, along her shining sides, were placed the windows through which her crew would watch the progress of the battle. Her prow was occupied by the same type of searchlight the earlier *Monitor* had borne. But this time the searchlight was surrounded by a hedge of shining silver points—the discharge mechanism for the lightning flash. At the stern, instead of the opening running right through into the ship, was a tight bulk head, with the connections for the gravity-beam rocket-mechanism leading through it. As Sherman had pointed out, "If this lightning is going to do us any good, we've got to get above our opponent, and those Lassans have built machines that made interplanetary voyages. We've got to make this boat air-tight so that we can go right after them as far as Rigel if necessary."

It had been decided, in view of the other monitors that were building, to make the trial trip of the second rocket-cruiser also a training voyage, with Beeville and Yoshio replacing Murray Lee and Gloria in her crew. They climbed in; the spectators stood back, and with a thunderous rush of explosions and a cloud of yellow gas, the second *Monitor* plunged into the blue.

"Where shall we go?" asked Sherman, as the ship swooped over the plains of New Jersey.

"How much speed is she making?" asked Ben Ruby.

"I don't know exactly. We didn't have time to invent and install a reliable speed gauge. But—" he glanced at the map before him, then down through the windows at the surrounding country. "I should say not far short of eight hundred an hour. That improved box sure steps up the speed. I'm not giving her all she'll stand, even yet."

"If you've got that much speed, why don't you visit Chicago?" asked Beeville. "The Australians have only pushed out as far as Ohio and there may be some people there."

"Bright thought," remarked Sherman, swinging the prow of the vessel westward. "No telling what we'll find, but it's worth a look, anyway."

For some time there was silence in the cabin as the rocket-ship, with alternate roar and swoop, pushed along. Yoshio was the first to speak:

"Ah, gentlemen," he remarked, "I observe beneath window trace of city of beer, formerly Cincinnati."

"Sure enough," said Ben, peering down. "There doesn't seem to be much beer there now, though."

The white city of the Ohio vanished beneath them, silent and deserted, no sign of motion in its dead streets.

"You know," said Sherman, "sometimes when I see these cities and think of all the Lassans have wrecked, it gives me an ache. I think I'd do almost anything to knock them out. What right did they have to come to this country or this earth, anyway? We were letting them alone."

"Same right wolf obtains when hungry," said Yoshio. "Wolf is larger than rabbit—end of rabbit."

"Correct," agreed Beeville. "They were the strongest. It's a case of hit or be hit in this universe. Our only out is to give them better than they give us."

"Oh, I don't know," said Ben Ruby, "it may be a good thing for the old world at that. You never heard of all the governments of the world cooperating before as they are now did you? There are still people alive you know. Civilization hasn't been killed off by a long shot. And the lousy blue coloring that affected all the people who didn't get metallized isn't going to be permanent. The babies that are being born there now are normal, I hear. In a few generations the earth will be back to where it was, except for us. I don't know of any way to reverse this metal evolution."

"Neither do I," said Beeville, "unless we can get another dose of the 'substance of life' as the Lassans

call it, and we won't get that unless they decide to leave the earth in a hurry."

"Look," said Sherman, "there's Chicago now. But what's that? No, there, along the lake front."

Following the direction of his pointing finger they saw something moving vaguely along Lake Shore Boulevard; something that might be a car—or a man!

"Let's go down and see," offered Ben.

"O. K. chief, but we've got to pick a good landing place for this tub. I don't want to get her marooned in Chicago."

THE explosions were cut off, the wings extended, and Sherman spiralled carefully downward to the spot where they had seen the moving object. With the nicety of a magician, he brought the ship to a gliding stop along the park grass, and followed by the rest, Ben Ruby leaped out. The edge of the drive was a few yards away. As they emerged from the ship no one was visible, but as they walked across the grass, a figure, metallic like themselves, and with a gun in one hand, stepped from behind a tree.

"Stand back!" it warned suspiciously. "Who are you and what do you want?"

"Conversation with sweet-looking gentleman," said Yoshio politely, with a bow.

"Why, we're members of the American air force," said Ben, "cooperating with the federated armies against the Lassans, and we were on an exploring expedition to see if we could find any more Americans."

"Oh," said the figure, with evident relief. "All right, then. Come on out, boys."

From behind other trees in the little park, a group of metallic figures, all armed, rose into sight.

"My name's Ben Ruby," said Ben, extending his hand, "at present General commanding what there is of the American army."

"Mine's Salsinger. I suppose you could call me Mayor of Chicago since those birds got Lindstrom. So you're fighting the Lassans, eh? Good. We'd like to take a few pokes at them ourselves, but that light-ray they have is too much for us. All we can do is pot the birds."

"Oh," said Ben, "we've got that beat and a lot of other stuff, too. How many of you are there?"

"Eight, including Jones, who isn't here now. Where are you from, anyway? St. Louis?"

"No, New York. Is anybody alive in St. Louis or the other western cities?"

"There was. We had one man here from St. Paul, and Gresham was from St. Louis. The birds got him and carried him off to the joint the Lassans have in the Black Hills, but he got away."

"Have they a headquarters in the Black Hills, too? They have one in the Catskills. That's where we've been fighting them."

The explanations went on. It appeared that Chicago, St. Louis and other western cities had been overwhelmed as had New York—the same rush of light from the great comet, the same unconsciousness on every side, the same awakening and final gathering together of the few individuals who had been fortunate enough to attract the attentions of the Lassans' birds and so be sent to their cities for transformation into robots.

Since that time the birds had raided Chicago and the other western cities unceasingly, and had reduced the original company of some thirty-odd to the eight individuals whom Ben had encountered. Before the birds had attacked them, however, they had managed to get a telegraph wire in operation and learn that people were alive at Los Angeles—whether mechanized or not they were uncertain, but they thought not.

Once, several weeks before, a Lassan fighting-machine had passed through the city, wrecked a few buildings with the light-ray, and disappeared westward as rapidly as it had come.

With some difficulty and a good deal of crowding the eight Chicagoans were gotten into the *Monitor II* for the return journey. They were a most welcome reinforcement and would furnish enough Americans to man all five of the extra rocket-cruisers.

"I hope," remarked Sherman, a couple of days later, "that those Lassans don't come out quite yet, now. We've got the ships to meet them now, but the personnel isn't as well trained as I should like. Salsinger nearly smashed up one of the ships yesterday making his landing and one of the wings on another cracked up this morning when Roberts tried to turn too short. These rocket-ships are so fast you need a whole state to handle them in."

"And I," replied Ben Ruby, "hope they come out damn soon. As you say, we've got the ships now, but they're not so slow themselves, and with the building methods they have, they can turn out ships faster than we can."

"All the same, I'd like a few days more," Sherman countered. "In this brand of war it isn't how much you've got, but what you've got that counts. Look at all the Australians—half a million men, and the only good they are is to work in factories."

"Can't blame them for not being made of metal like us," said Ben. "They're doing their best and we wouldn't be here but for them. Grierson is having the shops build us another ten rocket-cruisers, on the chance that we pick up some reinforcements somewhere in the west."

"Good," said Sherman, "and I have another idea. I think we ought to keep at least one monitor on patrol over the Lassan city all the time. They're apt to get out and sneak one over on us. She can stay high up, near the edge of the atmosphere. Of course, she can't radio, but she can fire a couple of shots if she sights them coming out, and we can make a static detector that will register the disturbance. Then we can catch them as fast as they come out, when they'll be easiest to attack."

"How about the other Lassan city out in the Black Hills?" asked Ben.

"Would be bad strategy to try to handle them both at once, wouldn't it," said Sherman, "Still, if you think so . . ."

CHAPTER XXII

The Great Conflict

IT WAS *Monitor VII*, manned by the Chicagoans, which had the honor of sighting the enemy. Just as the twilight of a bright May day was closing down over the radio men at the Philadelphia airport, the static detector marked an unusual disturbance, then two quick shocks, which must have come from the patrol's bow beam. In quick succession, the other five, standing ready on their starting ramps, took in their crews, and roared up and away in a torrent of explosions at a thousand miles an hour.

Soaring to fifty thousand feet above the earth, the squadron of rocket-ships made its way north, *Monitor II* in the lead.

"Well, here we go," called Gloria, gaily, from her seat behind the searchlight. "Hope they don't give us the run-around this time."

"They won't have the chance," said Ben. "That is,

provided those Chicago boys have sense enough to remember their instructions and let them alone till we all get there. With six of these ships we ought to be able to rough 'em up a little bit."

At a speed of over a thousand miles an hour, thanks to the thinness of the atmosphere through which they were traveling, it was only a few minutes' hop from Philadelphia to the Catskill city of the elephant-men. Ben had hardly finished speaking before Sherman called from the control seat, "There they are!"

Far beneath, half revealed, half-hidden by the few tiny clouds of fleece that hung at the lower altitudes, they could see the naked scar in the hills that marked the Lassan headquarters. Around it floated half a

Behind them something fell with a crash; ape-men ran gibbering with fright.

(Illustration by Paul)

dozen of the huge green balls they had encountered on the last occasion. As they swept by, another one, looking like a grape at the immense distance, trundled slowly out from the enormous door, swung to and fro for a second or two and then swam up to join those already in the sky. *Monitor VII* was to the north and

above them—as she perceived the American fleet she swept down to join the formation, falling into her prearranged place.

"Do we go now?" asked Sherman.

"Not yet," said Ben. "Give them all a chance to get out. The more the merrier. I'd like to finish the job this time. We can't get in that door, and if we did the rocket-ships would be no use to us in those passages, and they're the best we've got. Besides they're playing snooty too, and aren't paying a bit of attention to us. I hope they intend to fight it out to a finish this time."

They turned north, giving the Lassans time to assemble their fleet. "What's the arrangement?" asked Gloria. "Do we all go for them at once?"

"No. We dive in first and the rest follow behind, pulling up before they get in range. If anything happens to us, they'll rescue us—if they can. You see we don't know what they've got any more than they know what we've got, and I thought it would be a good idea to try the first attack with only one ship. In a pinch the rest can get away—if the Lassans haven't developed a lot of speed on those green eggs of theirs."

"How many now?" asked Sherman, from the controls, as the squadron swung back southward and the scarred mountain swam over the horizon again.

"Two—five—nine—eleven—oh, I can't count them all," said Gloria, "they keep changing formation so. There's a lot of them and they're coming up toward us, but slowly. They haven't got that blue beam at the base any more, either—you know the one that globe we got after was riding on."

As they approached it was indeed evident that the green globes were rising slowly through the twilight in some kind of loose formation. It was too complex for the American observers to follow in the brief glimpses they were vouchsafed as they swept past at hurricane speed. There seemed to be dozens of the Lassan globes; as though they expected to overwhelm opposition by mere force of numbers. Nearer and nearer came the rocket-ships, nearer and nearer loomed the sinister Lassan globes, betraying no signs of life, silent and ominous.

"Go?" called Sherman from his seat at the controls.

"Go!" said Ben.

The *Monitor II* dived; and as she dived, Gloria Rutherford switched on the deadly beam of the searchlight which would carry the gravity-beam against their enemies. For a moment it sought the green globes; then caught one fairly. Ben Ruby threw the switch; and down the light beam leaped the terrible stream of the broken atoms like a wave of death. Leaped—and failed!

FOR as it struck the green globe, instead of the rending explosion and the succeeding collapse, there came only a bright handful of stars, a coruscating display of white fire that dashed itself around the Lassan ship like foam on some coast-rock. It reeled backward, driven from its position under the tremendous shock of the sundered atoms, but it remained intact.

"Well, I'm a son-of-a-gun!" declared Sherman, as he put the *Monitor* into a spiral climb at nine hundred miles an hour to avoid any counter-attack. "If they haven't found a gravity screen! I didn't think it was possible. Goes to show you you never can tell, especially with Lassans. Look out folks, here comes the gaff, I'm going to loop!"

For as he spoke the formation of green globes had opened out—swiftly by ordinary standards, though slowly in comparison with the frantic speed of the American rocket-vessel. From half a dozen of them the racking yellow ray of infra-sound leaped forth to seek the audacious ship that had attacked them single-handed. All round her they stabbed the atmosphere, striking the few clouds and driving them apart in a fine spray of rain, but missing the *Monitor* as she twisted and heaved at frantic speed.

Twenty miles away and high in the air they pulled up to recover themselves.

"And *that*," Sherman went on with his interrupted observation, "explains why they aren't using those blue beams for support any more. Of course a gravity screen that would work against our beam would work against the gravity of the earth just as well. They must have some way of varying its effect, though. They aren't rising very fast and haven't got much speed."

"Probably the Lassans can't stand the acceleration," suggested Murray.

"Probably you're right. They can't have less than one Lassan in each globe. . . . Of course, they might control them by radio, with the thought-helmets and have the crews all robots, but that wouldn't be a Lassan way of doing things. And I doubt if they'd think radio safe, anyhow, even if they know about it, of which I'm not sure. We're shedding any amount of static around, and would play merry hell with most any radio. Wish I knew how they worked that gravity screen, though. I'll bet a boat-load of Monitors against a thought-helmet that it's magnetic."

"Wish we had some way to signal the rest of the fleet," said Ben, as they swung into their position at the head of the formation again. "I don't want them pushing in there with the gravity-beam if it isn't going to do any good."

Murray laughed. "They'll find it out soon enough. I think we've got plenty speed to beat those infra-sound rays, too. If that's as strong as they come, we've got 'em licked."

"Don't crow yet, boy friend," said Gloria. "You don't know what those babies have up their sleeves—excuse me, their trunks."

As the American fleet formed for a mass attack, the Lassan globes had been rising, and now they were a bare five thousand feet below the rocket-cruisers, swinging along at a height of 25,000 feet above the earth in the last rays of the setting sun. As the green globes rose they took their places in a formation like an enormous crescent, the ends of which were extended as each new globe came up to join it.

"Looks like they want to get us in the middle and pop us from all directions at once," observed Sherman. "Well, here goes. Pick the end of the line; that's our best chance. How's your potential, Gloria?"

"O. K., chief," she answered. "Lightning this time?"

He nodded. The rockets of the *Monitor II* roared; its prow dipped forward, and at an incredible speed it swept down on the line of Lassan warships, followed by the rest of the American fleet. But it was no surprise this time. As the monitors plunged in, from every green globe that could bring them to bear, the long yellow rays shot forth. Right through them the *Monitor II* plunged; the grate of it, even through their double coating of armor and the vacuum chambers, set their teeth on edge; then the rocket-ship was pointing directly down at one of the Lassans and Gloria snapped the key that released the artificial lightning.

A jagged beam of flame, intenser than the hottest furnace, leaped through the air, struck the green globe, and sought the earth in a thousand tiny rivulets of light. For just a second the globe seemed unharmed; then slowly, and almost majestically, it began to dissolve

in mid-air, spouting flames at every pore. Fully ten miles down and beyond, the *Monitor* turned again, and not till then did the sound of the explosion reach them, a terrific, rending thunder-clap.

"See that?" cried Sherman. "That formation of theirs isn't so dumb. They've got it all ranged out; none of our ships can get at them without coming through at least one of those yellow rays, and if we stay in them too long—blooie!"

They peered through the windows at the formation. Off at one side, they could make out the forms of two more rocket-ships, outlined against the sky, while behind and above them pursued by the searching yellow beams, came the rest. As they turned, they saw the gravity-beam shoot from one of the American ships, crumple uselessly against a green globe. Then they plunged in, again, firing the gravity beam earthward to work up the potential for another lightning discharge.

THE hills below rocked and roared to the repeated shock. Trees fell in crashing ruin as lightning-bolt or infra-sound shivered them to bits; great cars of burned earth and molten rock marked the spots where the gravity-beam struck the ground. All round was a maze of yellow rays, lightning flashes, and green globes that reeled, rose, fell, sometimes blowing up, sometimes giving ground, but always fighting back sternly and vigorously and always rising through the clear spring evening.

Murray Lee, at the rear of the ship, was the only one to see an American rocket-ship, caught and held for a few fatal moments by two yellow rays, slowly divest itself of its outer armor, then of its inner, and go whirling to the earth, dissolved into its ultimate fragments by those irresistible pennons of sound.

Gloria Rutherford at the prow was the only one to see another caught bow-on in a yellow ray, reply by firing its gravity-beam right down the ray and into the green globe through the port from which the ray had issued. The ray went out—a spreading spot of flame appeared at the port and the great green globe crumpled into a little ball of flame before her eyes. But such events as these were the merest flashes in the close-locked combat. For the most part they had time to do nothing but handle the controls, throw switches to and fro, shoot forth gravity-beam and lightning-flash in endless alternation at the Lassan ships of which there always appeared to be one more right before them as Sherman twisted and turned the *Monitor* with a skill that was almost uncanny.

Suddenly he pulled out; the four looked round. They were miles high; below half hidden in the dusk, were the red and brown roofs of a city. Far away on the horizon the battle still roared; a rolling cloud of smoke now, shot with the vivid fires of the American lightning flashes. The wings of their ship were spread; they were soaring gently earthward without the application of the rocket power.

"Had to get away for a minute," Sherman explained. "We were heating up from the speed. My God, but we're high up; at least 45,000 feet!"

"Yes, and getting higher," Ben pointed out. "Those green globes must be headed for the moon."

"Do you know, I wouldn't be a bit surprised but what you're right," replied Sherman, "I'll bet an oil-ball against the whole Lassan city that they think we can't navigate space and they're trying to get above us and then hang around and pop us when we have to land. Well, come on gang, let's get back."

He shot the wings in again, worked the controls, and they headed back toward the conflict.

It was less of a turmoil now, more of an ordered swing, charge, pass and charge again against the diminishing number of the Lassan globes. Of the American rocket-ships Gloria could now count but two beside their own. One she had seen break up; whether the others, badly damaged, had hauled out for repairs, or whether, riven by the deadly yellow ray, they had gone crashing to the earth, there was no way of knowing. But the Lassans were not escaping unharmed; there were hardly a third as many as at the beginning and even as they approached another one disappeared in the vivid flash of the rocket's lightnings. Still the rest rose steadily on, going straight up as though they indeed hoped to escape their tormentors by rising to the moon.

They dived in: Gloria pressed the lightning key and another Lassan globe blew up; then they were climbing again. Beneath them the night had come. The earth was a dark mass, far down, and from that enormous distance looked slightly dished out at the edges. But though the earth was dark, at that ultimate height of the atmosphere the sun had not yet set. Still the strange fight went on, higher and higher. The roar of the exhaust explosions died away behind them and Murray looked questioningly at Sherman.

"Out this far, there isn't much air," he said. "Takes air to conduct sound. Wonder what they're up to, anyway. All right, Gloria."

He dived at another Lassan and she pressed the lightning ray; but this time there was no flash, no flaming Lassan ship falling in ruins to the ground.

"Who'd have thought it!" said Sherman, as he swung the *Monitor* round after the charge. "Of course—we're up so high that we've made a spark gap that even lightning won't jump. But I don't get their idea; those sound rays won't be any good out here, either."

CHAPTER XXIII

Into the Depths

THE *Monitor* turned again, speeding back toward the remaining Lassan ships; with a startling shock of surprise, Gloria noticed that there were only two. Down below them one of the last three American rocket-cruisers had spread her wings and was gliding gently toward the earth. Like the *Monitor's*, her crew had evidently found the lightning flash worthless at the enormous altitude and was abandoning the battle till conditions became more favorable. The other rocket remained faithful; turned as they turned and charged up with them toward the last of the Lassans.

It was a weird scene. They had climbed so far that the earth was now perceptibly round beneath them; a vague line marked the westward progress of the sunset and beyond it the sun, an immense yellow ball, set with a crown of vividly red flames, hung in the inky-black heavens. On the opposite side, the stars, more brilliant and greater in number than any ever before viewed by the eye of man, made the sky a carpet of light across which the green globes moved like shadows, their under sides illumined by the sun.

As the *Monitor* approached, the nearest globe seemed to be turning on its axis. Suddenly, out of the side that faced them, came the quick, stabbing beam of the light-ray, like the flicker of a sword. It struck the *Monitor* full on the prow. There was a burning rain of sparks past the windows; the rocket-ship leaped and quivered, and those within felt, rather than saw, something give. Then, with a tremendous explosion, all the more horrible because utterly without sound, the great globe that had thrown the ray, burst into fragments.

And at the same moment the *Monitor* began to fall.

Down, down, down went the rocket-cruiser with the round ball of the earth rising to meet them at a speed incredible. The sun went out; they were swallowed in a purple twilight as they plunged. The earth changed from a ball to a dish, from a dish to a plane, from a plane to a dark mass without form, and in the mass vague lights and glimmerings of water came out, and still their course was unchecked, still Sherman fought frantically with the useless controls.

Desperately Murray pressed the firing keys of the stern-rockets; unchecked she drove on, almost straight down, plunging to certain destruction. The earth loomed nearer, nearer, the end seemed inevitable—.

Then Gloria saved them. In some moment of inspiration, she threw on the searchlight; and the automatic connection fired the gravity-beam. There was a shattering report; the course of the *Monitor* was halted, and bruised and broken, she tumbled over and over to the ground, safe but ruined.

"Suffering Lassans!" said Ben Ruby, as they picked themselves out of the wreckage, "but that was a jar. What hit us, anyway?"

Sherman pointed to Gloria, breathlessly. "Give the little girl a hand," he ejaculated. "She sure pulled us out of the fire that time."

"I'll say she did," said Murray, "but what happened, anyway? I thought that light-ray of theirs wouldn't work on these ships."

"It won't—in air," said Sherman ruefully, surveying the wreck of the *Monitor*. "But the air blankets down the effect a lot. Out there we got the whole dose. Even then it shouldn't have hurt us so seriously, but I expect a lot of our lead sheathing got jarred loose when we went through those yellow rays and when they let that light-ray go, she leaked all over the place. Wonder what made that Lassan ship blow up like that, though? I thought she sure had us."

"Oh," said Ben, "I think maybe I did that. When the light-ray came on it occurred to me that the gravity-beam might go down their beam of light just as fast as it would down ours, and they must have a porthole or something through their gravity-screen or they couldn't let the ray out. So I just let them have it."

"Boy, you sure saved the lives of four of Uncle Sam's flying men that time. About one second more of that stuff and we'd have cracked up right there. Look at the front of our bus. The outer plating is all caved in and the inner is starting to go."

"She is pretty well used up isn't she? What gets me though, is that there's one more of those things loose."

"Look!" cried Gloria suddenly, pointing upward.

Far in the zenith above them they saw a point of light; a point that grew and spread and became definite as a great star; then it became a shooting star, plunging earthward, and so great was its speed that even as they watched they could make out a green fragment, flame-wrapped in its midst.

"The last one!" said Sherman. "Thank God for that. Wonder how they got her?"

"Wonder what we do next," remarked Murray, practically.

They looked about them. They were on a hillside in a little clearing in a high, narrow valley. On every side were woods, dark and impenetrable. Just below they could hear the purl of a brook, and the trees about them were bare with the dark bareness of spring, a few fugitive buds being the only announcement that the season of growing was at hand. No landmarks, no roads were visible, and the sky was darkening fast.

"The question," said Gloria, "is not where do we go, but where are we going from."

"It might be most anywhere," remarked Murray. "Adirondacks, Catskills, or even Laurentians. I don't think we got far enough west for it to be the Blue Ridge or the Appalachians, but there's no way of telling."

"Well," Gloria offered, "I've been in a lot of mountains in my day, but I never saw any where following a stream didn't take you somewhere sooner or later. I vote we trail along with that brook there and see what happens."

"Bright thought," commented Ben. "Let's see what we can dig out of the wreck by way of weapons."

"What for? There aren't any animals, and they couldn't hurt you if there were. If we meet any of the Lassans any weapon you got out of that mess wouldn't be much use. Wish we had a flashlight though."

Treading carefully, but with a good deal of noise and confusion, they began to crash their way through the underbrush along the bank of the stream. At the foot of the valley it dived over a diminutive waterfall and then tumbled into another similar brook. Along the combined streams ran a road—a dirt road originally, now long untraveled, muddy and bad, but still a road.

An hour's walking brought them around the foot of another mountain and into a valley where the road divided before a projecting buttress of rock. A teetering sign-post stood at the fork. With some trouble, and after getting himself immersed to the knees in the ditch, Murray managed to reach it and straining his eyes in the starlight, made out what it said. "THIS WAY TO HAMILTON'S CHICKEN DINNERS. 1 MILE" it read. With a snort of disgust he hurled the deceitful guidepost into the ditch and joined the others.

"Toss a coin," someone suggested. No coins. A knife was flipped up instead. It fell heads and in accordance with its decision they took the road to the right. It led them along beside the stream for a while, then parted company with it and began to climb, and they soon found themselves at the crest of the hill. The night had become darker and darker, clouding over. But for the road they would have been completely lost. Finally, after skirting the hillcrest for a distance, the road dipped abruptly, and as it did so, they passed out of the forest into a region cleared but not cultivated, with numerous close-cut stumps coming right to the roadside.

"But for the fact that it's a long ways away," remarked Sherman, "I would say that this was the district around the Lassan headquarters."

"What makes you think it's a long ways away?" asked Gloria. "Do you know where we are? Neither do I."

"By the nine gods of Clusium, I believe that's it, at that!" said Sherman suddenly as the road turned past a place where a long scar of earth ran up the hillside, torn and blackened. "Look—that looks exactly like the result of one of our gravity-beam shots! And there—isn't that the door?"

They were on the hillside now, directly above the place he had indicated. From above and in the darkness it appeared as a cliff, breaking down rapidly to the valley, but Sherman led them to one side, straight down the hill and in another moment they were at its base. The great door through which the green balls had poured out that evening stood before them, a mighty arch reaching up into the dimness—and it was open.

"Looks like the boys haven't come home to supper yet," said Gloria in an awed whisper, contemplating

the gigantic arch and the dark passage into which it led.

"Yes, and a lot of them aren't coming, either," replied Murray in a similar tone. "But what do we do—make a break for it or poke in and see if anybody's home?"

"Listen, you three," said Sherman. "You run along and build some more monitors and go get whatever comes out of here. Me, I'm going to have a whirl at this door. The swellest girl in the world is in there, or was, and and I'm going to find her."

"Nothing doing, old scout," said Ben. "If you go in we go too—except Gloria."

"What's the matter with me?" she demanded. "I'm made of the same kind of machinery you are, aren't I? And I'm good enough to run your foolish fighting-machine. Don't be a goop." And she stepped forward.

The blue-domed hall that gave directly on the outer air had disappeared since Sherman and Marta Lami had raced out of it on that night that now seemed so long ago. In its place was an enormous tunnel, lined apparently with some metal, for its sides were smooth and shimmering. The portion they entered was lightless, but it curved as it ran down, and around the curve they could see the faint reflection of a light somewhere farther along the passage. Their feet echoed oddly in the enormous silence of the place. There seemed nothing alive or dead within.

"Boy," whispered Murray to Gloria, "if one of those green globes comes back now it will squash us flatter than a false prosperity bankroll. This is the craziest thing we ever did."

"Right," she said, "but what the hell? I just came for the ride. Look, what's that?"

Before them, around the bend of the passage, they could see another door from which the light which glittered along the tunnel was streaming. In the opening stood a man, or what seemed to be a man, facing, fortunately, inwards.

After a moment's cautious peering, Sherman pronounced him one of the ape-man slaves. He wore a thought-helmet, and had some kind of a weapon in his hand. The four held a cautiously whispered conference.

"Listen," said Sherman, "we've got to jump that baby before he does anything. I think he's got one of those small light-guns. Didn't know they trusted them to the slaves, but I suppose so many of the Lassans got shot up that they had to do it. Now, who's got a knife?"

A search of pockets revealed that Murray Lee had the only one in the company.

"Never mind," said Sherman, "one is enough. Now we three will sneak up on him. The main thing is not to let him see us; if he makes a move, jump him quick. Remember there's a Lassan at the other end of the line, and the Lassan is getting everything he thinks. He doesn't think very fast, but don't take chances. If he sees us, you hop in, Murray, and cut the wire that leads out of his helmet and short-circuit it. They may have it fixed so that it won't short-circuit by now but I don't think so. If he doesn't see us before we jump him, clap your hands over his eyes, Ben, and I'll try to get the helmet off him and pass out some information to the Lassan at the other end that will keep him quiet. But the main thing is to get that gun first. Everybody understand?"

Three heads nodded in unison.

"All right. Come on."

They crept up the passage together avoiding touching hands lest the ring of the metal should warn the sentry. As they approached they could see the room he looked out on was one of the familiar blue-domed halls; the passage ended sharply some six feet above its floor ("Taking no chances on more escapes" thought Sherman) and that the hall was of enormous size. There were machines in one corner of the floor. In another stood one of the green globes, half finished, with spidery trellises of red metal outlining what would be the surface of the sphere. Around it helmeted mechanical men came and went busily. The rest of the hall, for all its vast extent, was completely empty. At the far end was a row of doors; high on the far side an opening that looked like a door but had no obvious purpose.

This much they saw; then the sentry stirred as though to turn, and with a quick patter of feet, they were upon him. Before he had time to turn around Ben Ruby launched himself in a perfect football tackle for his legs, bringing the ape-man down with a crash. As he fell, Sherman snatched at the helmet, and Gloria the light-gun, which had dropped from his fingers, while Murray pinioned the struggling creature's arms. In a moment Sherman found the finger-holes in the helmet, pressed, and it came loose in his hands while the ape-man ceased to struggle.

"Let him up now, folks," said Sherman, "give him a swift kick and point him toward the door. He won't come back." And he rapidly adjusted the thought-helmet to his own head.

The Lassan at the other end was evidently disturbed. He had received the sound of the crash from the ape-man's brain and was asking querulously what it meant.

"What has happened?" the thought demanded insistently. "What is it that struck you? Have the fighting machines returned? Show a picture of what you see. Are the slaves escaping?"

"Everything's all right," Sherman sent back. "Something broke loose down below and I stumbled trying to look at it." He closed his eyes, forming a mental picture of the hall, with everything in order, then one of the passage, and reached up and detached the helmet, motioning to Murray for the knife. An instant's sawing and the device short-circuited with a fizzing of blue sparks.

"That will give that one a headache for a while," he remarked. "We'll have to hurry, though. When he comes to he'll investigate and then there'll be trouble."

"What's that?" asked Gloria, pointing across the hall at the aperture high up in the wall. A gleaming beak had been thrust out and the bright, intelligent eye of one of the dodo-birds was regarding them malevolently from the opening.

"Shoot, quick!" said Sherman, "For God's sake! They're telepathic. They'll have every Lassan in the place after us."

Gloria fumbled a second with the gun, located the finger hole, sent a spurt of light flying across the room. It missed the head, but found its mark somewhere in the body of the bird, for there was a squawk and the head disappeared. Sherman vaulted down the six-foot drop, landing with a bang. "Come on," he cried, "short-circuit every wire you can find; tear them loose if you can't cut them any other way—and make for the middle door at the back."

They ran across the hall toward the work benches. It seemed enormous; like a race in a dream, in which one seems to make no progress whatever. But the workers did not appear to notice them. Driven by the thoughts of the controlling Lassans, they were incapable of attending to anything else unless it was forced on their attention.

As they approached the benches, however, one flat-faced ape-man almost ran into them. His face took on an expression of puzzled inquiry and at the same moment a figure whose carriage plainly showed it human stepped down toward them from the half-completed green globe. Gloria paused, leveled her light-gun at the ape-man, and his face vanished in a spray of fire. The human advanced slowly as though struggling against some force that was too strong for him. Sherman reached him first, wrenched the helmet from his head and dropping it on the floor stamped on it till the fine mechanism was irretrievably ruined. The mechanical human fell to his knees.

"Who are you?" he asked, "God?"

"We're all right," said Murray, and Sherman, "which way to the living cages? Do you know Marta Lami?"

The man shook his head like one recovering from a dream. "I do' know," he said, "they had the helmets on me for twenty periods. I do' know nothing. We came through that door. In the little automobiles."

He indicated a door behind some of the machines.

Speed was urgent, but Sherman paused to instruct them briefly. "There'll be another sentry at the door. Pop him first, Gloria. Murray, take your knife, and Ben, get anything you can and cut all the wires on those birds around here. There are some more wires leading out of the machines. Be sure to get them, too. You might let loose something important. We'll try to get you another gun."

CHAPTER XXIV

The Ending of It All

IMPASSIVELY, oblivious of the invasion about them, the workers kept on at their machines like ants when their nest is broken open. Sherman and Gloria dodged around one of them, avoiding the direct line of sight of the robot who worked at it and walked rapidly toward the door giving on the car-tracks. The man on duty had no weapon, but paid them no attention, being occupied in watching a car just sliding in to the station. "It's a shame" began Gloria, but "Shoot!" insisted Sherman and the light-ray struck him in the back of the neck fusing head and neck to a single mass. As he sank to the floor he turned partly over.

"Good heavens, it's Stevens!" said Gloria, "the man who organized the rebellion against Ben Ruby in New York and brought the dodos down on us."

"Never mind. Hurry," her companion urged in a fever of activity. The doors of the car were opening and half a dozen mechanical men stepped out, mostly with the foolish visages and shambling steps of the ape-men, but two whose upright walk proclaimed them human.

"Listen, everybody," called Sherman, quickly. "We're from outside. We're trying to bust up this place. Get back in the car, quick, and come help us." Suiting the action to the word, he leaped for the first compartment, reached it just as it was closing and wedged himself inside.

The car had a considerable run to make. In the dimly-lighted compartment, Sherman was conscious of turns, right, left, right again, and of a steady descent. He wondered vaguely whether he had taken the right method; whether the cage rooms lay near one another or were widely separated. At all events the diversion in the hall of the green globes would hold the attention of the Lassans for some time, and the short-circuiting of so many lines would hamper their methods of dealing with the emergency . . .

The car came to a stop. Sherman heard a door or two open, but his own did not budge, and he had no needle to stir it. He must wait, hoping that Gloria had not been isolated from him. She had the ray-gun at all events, and would not be helpless. Then the door opened again.

He was released into a cage that seemed already occupied, and one look told him that his companion was an ape-man.

"Gloria!" he called.

"Right here," came the cheerful answer from two cages down. "This is a swell thing you got me into. How do we get out of here?"

"Have you got a pin or needle of any kind?" he asked.

"Why—yes. Turn your back." She did something mysterious among her feminine garments and held up an open safety-pin for him to see across the intervening cage.

"Stick your arm through the bars and see if you can toss it down the track. If I don't get it, you'll have to blast your way out with the light-gun, but I don't like to do that. Don't know how many shots it holds and we need them all."

She swung with that underarm motion which is the nearest any woman can achieve to a throw. The pin struck the gleaming car-rail, skidded, turned and came to rest before Sherman's cage. He reached for it, but the ape-man in the cage, who had been watching with interested eyes, was quicker. Fending Sherman off with one huge paw, he reached one of his feet through the bars for the object and held it up before his eyes admiringly.

Sherman grabbed, but this only fixed the ape-man in his evident opinion that the object he held was of value. He gripped it all the tighter, turned an amiable face toward Sherman and gibbered. Losing patience at this unfortunate contretemps when time was so precious, the aviator lifted an iron foot and kicked him, vigorously and with purpose, in the place where kicks do the most good. The ape-man pitched forward, dropping the fascinating pin, then rose and came toward Sherman, his expression clearly indicating his intention of tearing the American limb from limb. The cage was narrow: the ape-man the bigger of the two. Sherman thought hard and fast. The oil-ball!

He leaped for the lectern, snatched it open, seized the ape-man's oil-ball and held it aloft as though to throw it out into the corridor. With a wail of anguish the simian clutched at the precious object. Sherman squeezed it enough to let a little stream run forth, holding it just out of his reach, and as he stabbed for it again, tossed it back into a corner of the cell. The ape-man leaped upon it covetously, and Sherman bent over the bars, fumbling in his nervous haste to unlock them.

Luckily the safety-pin fitted. With a subdued click the bars swung inward and he was out in the corridor. Another moment and Gloria was free also.

"Any more people in here?" Sherman called. Three voices answered and he hurried from cage to cage, setting them free as the warning blue lights that prohibited shouting began to flicker around the roof.

"Come on," he called, "we must get out of here, quick!"

They hesitated a moment between the two doors, chose that at the upper end. As they raced through it, they heard a panel clash somewhere. The Lassans were investigating.

They were in one of the passages through which the cars ran, with alternate bars of light and dark across it marking the termination of side-passages.

"Look!" said Gloria. Into the cage-room they had just quitted a car was coming, its featureless front gliding noiselessly along the track. "In here," said Sherman, pulling the others after him down the nearest lighted passage.

Followed by the other four Sherman followed it steadily along to the right, where it ended at a door.

"What now?" said someone.

"In," decided Gloria. "Likely to be a cage-room as not."

Sherman searched for the inevitable finger-holes, found them and pressed. The door swung back on—

A Lassan reclining at ease on one of the curious twisted benches beside which stood a tall jar of the same yellow-flecked green material they had seen the others devouring. The room was blue-domed but very small, and its walls were covered with soft green hangings in pendulous drops. A thought-helmet was on the elephant-man's head; its other end was worn by one of the mechanical people whose back was to the door as they entered, and who appeared to be working some kind of machine that punched little holes of varying shape in a strip of bright metal.

As the five Americans pressed into the room, the Lassan rose, reached for his ray-gun, but Gloria pushed the one she held into his face and he relaxed with a little squeal of terror, while Sherman reached into his pouch and secured the weapon.

As he did so the Lassan reached up and snapped loose the thought-helmet; the metal figure turned round and gazed at them.

"Marta!"

"The boy friend!"

THE Lassan was very old. His skin was almost white and seamed with sets of diminutive wrinkles, and as he regarded the two mechanical people, locked in each other's embrace an expression of puzzlement and distaste came over his features, giving place to one of cool and lofty dignity as he perceived that Gloria did not mean to kill him on the spot. Lifting his trunk, he motioned imperiously toward the thought-helmet which Marta had cast aside, then set the other end of it on his own head.

To the invading Americans, crowded into the little room, it seemed for a moment as though they had somehow burst into a temple. Sherman's face became grave, and following the Lassan's direction, he picked up the helmet and fitted it on his head. The thought that came through it gave a feeling of dignity and power such as he had never experienced before; almost as though it were some god talking.

"By what right," it demanded, "do you invade the room of scientific composition? Why are you not in your cages? You know you will receive the punishment of the yellow lights in the greater degree for this unauthorized invasion. Save yourself further punishment now by retiring quietly. You can take my life, it is true, but I am old and my life is of no value. Think not that I am the only Lassan in the universe."

"Sorry," Sherman gave him back, "but this is a rebellion. You are not familiar with the history of this planet, or you would know that American's can't be anybody's slaves. Let us go in peace and we will let you return to your own planet."

"Let us go!" came the Lassan's answer. "Your obstinate presumption surprises me. Do you think that the Lassans of Rigel, the highest race in the universe will let go where they have once grasped?"

"You will or we'll jolly well make you," replied the American. "Do you think your silly green globes are going to do you any good? The last one fell beside us tonight."

Sherman could sense the sudden wave of panic in the Lassan's thought at this unexpected answer. He had evidently assumed that they were from the underground labor battalions and were not familiar with events outside. But he rallied nobly.

"And do you imagine, foolish creature of a lower race, that the green globes are our last resource? Even now I have perfected a device that will wipe your miserable people from the planet. But if it did not, rather would we Lassans perish in the flames of a ruined world than abandon a task once undertaken; we who can mold the plastic flesh to enduring metal and produce machines that have brains; we who can control the great substance that underlies all life and matter."

"Well, here's one task you're going to abandon," Sherman thought back. "We, who can call lightning from the skies, are going to give you a terrible sock on the—trunk, if you don't. If you doubt it try and find how many Lassans live after today's battle. Go on back where you came from. You're not wanted in this world."

"You know, or should know, the law of evolution," replied the Lassan. "The weaker and less intelligent must ever give way before the stronger. By the divine right of—" his flow of thought stopped suddenly, changed to a wild tumult of panic. Sherman looked up. Round the rim of the blue dome, where it stood above the hangings, a string of lights was winking oddly, in a strange, uneven rhythm. "God of the Lassans, deliver us!" the thought that reached his own was saying. "The tanks are broken—the light is loose!" Then suddenly his mind was closed and when it opened again it had taken on a new calmness and dignity and a certain god-like strength.

"I do not know how or where," it told Sherman, "but an accident has happened. Perhaps an accident produced by your strange and active race. The connections have broken; the tanks of the substance of life in the bowels of this mountain have broken and the whole is set free. It is hard to see the labor of centuries thus destroyed; to see you, creatures of a lower race, inherit a world so divinely adapted to the rule of intelligence.

"For in this accident the whole of our race must perish if you have told the truth about the destruction of our green globes. We called in all the Lassans from your world for the work of the destruction of your armies. Yes, you told the truth. Your mind is open, I can see it. We are lost . . . There is no hope remaining; it means destruction or the metal metamorphosis for every living Lassan, and there will be none to endow them with the life in metal we have given you.

"Perhaps it was our own fault. Your curious race, for all its defects, has certain qualities of intelligence, and above all that strange quality of activity and what you call courage. If we could have summoned up the same activity; if we had possessed the same courage to attack against odds, this would not have happened. It is our failure that we have depended too much on naked intellect; learned to do too many things through the hands of our servants. Had Lassans been at the controls of our fighting ships, instead of the automatons we used, you would never have conquered them so easily.

"Be that as it may. We have lost and you have won. I can show myself more generous than you would have been, and thus can gain a victory over you. If you would escape, follow the car-track straight on to where it forks; then take the left-hand turning. If you would

be restored to your former and imperfect and repulsive form (though I cannot conceive why you should, being permanently fixed in beautiful and immortal metal), do not run away, but await the coming of the substance of life in the outer hall or passage, being careful not to approach it too closely or to touch it, so that you may receive the emanation only. It is this emanation, surrounding our space ship that produced your present form, which we changed to machinery by our surgery; and it so acts on the metal of which you are composed that it will reverse the case. As for me I am old and tired; already the walls of this place tremble to the coming of my doom. Leave me, before I regret what I have told you."

HE REACHED his trunk up and disconnected the thought-helmet, and standing up, with a certain high dignity, pointed to the door.

Relieved of the helmet Sherman could hear a confused roaring like that on the day when Marta Lami and he had short-circuited the mining machine. "Come on," he called to the rest, dropping the helmet. "Hell's let loose. We've got to hurry."

Outside the roaring was perceptibly louder and seemed to be approaching. As they leaped down to the track a faint glow was borne to them redly along the rail. The ape-men in the cage-room they had escaped from were howling and beating the bars of their cages, with no blue lights to forbid them.

The track was slippery—Marta Lami and the three they had released from the cage room, unshod. Sherman gripped her by the hand. "Hurry, oh, hurry," he panted, pulling her along.

They passed another passage, down which a door stood open. The soft light that normally illuminated the place was flickering wildly, they caught a glimpse of three or four Lassans within, stirring wildly, rushing from place to place, trying this connection and that. The dull sound behind them increased; the track grew steeper.

"What about the rest?" gasped Gloria, running by his side.

"Don't know," he answered. "They did something. The whole place is coming down."

As they rounded a corner the track forked before them. Remembering the Lassan's parting instructions, Sherman led them to the left, passed another passage mouth, and they found themselves in a small blue-domed hall, empty save for a single car that stood on the track. There was just room to squeeze past it where the passage began again at the other end. And as they made it the roaring sound changed to a series of explosions, sharp and clear. The ground trembled, seemed to tilt; the car slid backward into the passage they had just vacated.

Ten feet, twenty-five feet more—and they were on the platform leading to the hall of the green globes. Sherman swung himself up, offered a hand to Marta. In a moment the others were beside them and they were darting for the door. The ground was trembling again, shock after shock. Something fell with a crash as they raced across the platform and into the hall.

Within, all was confused darkness and a babble of sound. A dodo screamed somewhere. An ape-man ran past them, gibbering, mad with fright, and dived to the track. Sherman ran across the hall, followed by Marta and the three he had released. Gloria halted.

"Murray!" she cried, "Murray!" and then lifted the light-gun and sent a pencil of fire screeching to the roof. There was an answering shock as something tumbled from the ceiling.

"Murray!" she called again, at the top of her voice. Behind them, through the platform something fell with a crash and a long red flame licked through the door, throwing tall shadows and weird lights across the bedlam within.

"Here!" came a voice, and Gloria turned to see Murray and Ben running toward her.

"Come on," she said, "hurry. The works is busted."

They made the doorway just as Sherman was pulling Marta up the six-foot step. Ben and Murray lifted Gloria in their arms, tossed her up. The red flame in the background had given place to a white one, and a boiling white mass of something was sending a long tongue creeping across the floor.

Willing arms snatched at those of Ben and Murray, pulling them upward to safety. They turned to run down the tunnel.

"No!" cried Sherman. "Stick! It's all right. The old bloke told me so."

There was another explosion and a great white cloud rolled toward them above the liquid tide. Then they lapsed into unconsciousness.

. . . . . .

Murray Lee yawned and sat up.

The others lay around him in curious piled attitudes as though they had dropped off to sleep in the midst of something. He noted, with a shock of surprise, that Ben Ruby's face, turned in his direction, was not metal, but good, honest flesh and blood. He gazed at his own hands. Flesh and blood likewise. He looked around.

The hall of the blue dome had vanished. A tangled mass of rock, cemented in some grey material, was before them, obscure in the darkness. At the other end was the passage, its ceiling fallen here and there, its sides caved in. But a stream of light showed that an opening still led to the outside.

He bent over and shook Gloria. She came to with a start, looked about her, and said with an air of surprise, "Oh, have I been asleep? Why, what's happened to you Murray? You need a shave." Then felt of her own face and found it smooth again.

"For Heaven's sake!" she ejaculated.

The sound brought the rest bolt upright. Sherman looked round at the others, then at the passage, and smiled with satisfaction.

"That old Lassan," he remarked, "told me the metal evolution would reverse if we got the emanation without letting the stuff touch us. Well, he was a sport."

"Yes, but—" said Marta Lami, standing up and feeling of herself. "Look what they did to us. My toes are flexible and my figure bulges in such queer places. I'll never be able to dance again. Oh, well, I suppose it doesn't matter—I'll be marrying the boy friend anyway." She took Sherman's hand and he blushed with embarrassment.

"Good idea," said Murray Lee and looked hard at Gloria.

She nodded and turned her head.

"Ho hum," said Ben Ruby. "The dictator of New York seems to be *de trop*. How does one get out of here?"

THE END

The Moon Destroyers

By MONROE K. RUCH

(Illustration by Paul)

The tremendous speed of the dive brought them so close that they could see the skeletons of wrecked ships piled up at the base of the precipice.

PROFESSOR ERICKSON, head of the International Seismographical Institute, sat with bowed head and pale face, watching the stylus of the instrument before him trace its path on the slowly revolving drum. The laboratory, situated high in the Himalayas, trembled slightly as mid-winter storms roared and whistled around it, but something quite different, and infinitely more sinister, was causing the needle to wander from its ordinarily straight path.

Suddenly, with horrible certainty, it jumped, wavered back and forth, and then moved rapidly to the right, until its black ink no longer traced a line on the white paper.

"Holden," shouted Erickson to his assistant, "what does the direction and distance finder tell us? The stylus has run clear off the graph."

Young Jack Holden was working feverishly over the dials and levers of the panel before him. Slender yet strong, he looked like a long-bow of stout old yew as he bent to the task. His steel gray eyes focused intently on the verniers, taking the readings. The muscles in his tanned cheeks were tight as he turned toward his superior. For a moment the very storm seemed to hush, awaiting the words. Then he spoke.

"It's the Laurentian fault!"

For a moment both men stared at each other, stunned and helpless.

"That means," Holden managed to say, "that New York is a mass of ruins."

Pictures were forming in his mind; he saw the huge steel and glass towers of the city, tossed and torn by the convulsive writhings of the earth beneath. Great engineers had said that the city was safe, that no tremors would ever disturb it, but they knew nothing of the terrific force of such a shock as this. Those massive buildings, thousands of feet high, would now be mere heaps of twisted junk. Holden closed his eyes to shut out the picture, but to no avail. His sister! God! She was probably one of the millions who now lay, crushed, bleeding and helpless beneath the wreckage of the too-proud metropolis.

"My boy," the professor was speaking, "we must stay with our work, no matter what happens." His voice was low; his entire family had been wiped out, without doubt, but Science must be served.

For hours the two sat before their instruments, as shock after shock was recorded. Jones came down from the television room above, and his report confirmed their observations in horrible detail.

"All communications from the city itself are cut off, but an airliner from England, which was about to dock, has broadcast the scene. Aid is being rushed from all over the world, but at a conservative estimate ten million are already dead, and millions more will probably die, buried and hidden as they are beneath the wreckage."

At last, nearly five hours after the first shock, the Professor stood up.

"I think that is all. My prophecies have come true, and at last my theories will be heeded. But the cost of it all, the horrible cost!"

MONROE K. RUCH

THE moon is not only the most prominent object in our heavens, but also an integral part of the earth. We are, so to speak, an astronomical unit, and we affect each other for better or for worse.

We know that the gravitational attraction of the moon causes our tides, and tends to slow up the earth in her daily rotation. It has also been deemed responsible for earthquakes, causing untold suffering among earth's people.

But so far the effect of the moon has been rather an inhuman affair. No man has gone to the moon to see just what conditions are there, and to observe accurately the influence that the moon and earth exercise over each other. But when interplanetary travel does come, when commerce between moon and earth may possibly assume importance in our lives, the influence of the moon upon us may be more accurately determined. And when it is, the amazing series of incidents, pictured in this story, may yet come true.

TWO weeks later a group of men were seated around the conference table in the spacious offices of the Department of Public Safety of the World Union. All faces were turned toward the stooped figure of Professor Erickson, who was speaking from the head of the table.

"Gentlemen, I have outlined to you, only too briefly, the damage caused by the quake a few days ago. I now state that a repetition of such a disaster is imminent. Great faults have formed in the basic granites throughout the entire globe. Observations recorded during five centuries since the first conception of the idea by Dr. Maxwell Allen in 1931, show conclusively that Earth-tides, set up by the attraction of the moon, cause a sweeping series of stresses and strains. These, coming to a fault, produce earthquakes. Now that there are huge faults in the basic rock, these quakes will be of a tremendous force and range which the most modern structures will be unable to resist."

"Professor," spoke John Dorman, Secretary of Public Safety, "if all this is true, and we are assured that it is, what on earth can be done about it?"

"Gentlemen, during nearly seventy years I have

studied that problem, and I have come to only one conclusion. Nothing on earth can be done about it, if you permit the remark, but men from earth can do something. *Destroy the moon!"*

A gasp went up from the great men assembled there. Erickson's colleagues nodded in helpless agreement.

"But how?" The question came from all sides. Famous engineers looked at each other questioningly.

"Gentlemen." This was a new voice, young and full of energy.

"Mr. Holden," responded the chairman.

"Professor Erickson was so kind as to confide in me several years ago, and since then I have been at work on this problem. I have solved it."

Eager interest shone on all faces. Jack Holden was known and liked by many of these men, despite his youth. His discovery of *hexoxen*, the chemical which turned solid matter into almost intangible vapor, had created quite a stir in scientific circles.

He now continued his address.

"If all the resources of Earth are made use of, it would be possible to produce hundreds of tons of *hexoxen* and sufficient amounts of the element Europium to act as a catalyst. That would be plenty to reduce the moon to a gaseous state. The clouds of gas could then be penetrated by anti-gravitational screens, which would cause the smaller pieces to drift off into space, where they will do no harm whatsoever."

Several distinguished engineers nodded their heads. One of them spoke.

"Mr. Secretary, the plan is entirely feasible. I move that Mr. Holden be given permission to make use of all the necessary resources to carry out his plan, and that he be placed in sole charge, assisted by an advisory board of which Professor Erickson shall be chairman."

The motion was carried, the papers drawn up, and the meeting adjourned.

Holden grasped Professor Erickson firmly by the arm and hurried him to the elevator.

"We've got just five minutes to get to the port. We're catching the first air-liner for San Francisco. There are three of the latest model Mars-Earth freighters there, which we will use for our expedition. We will also be near the best source of Europium. Hurry."

As the elevator shot downward, the old professor endeavored to congratulate Holden on his appointment.

"Forget it. This was your idea, and they should have named you leader of the expedition, but that really doesn't make much difference. Anything you say goes, see?"

A crowd was milling around the entrance to the Western Hemisphere tunnel. An official tried to stop Holden and his companion as they pushed their way through the crowd.

"The liner is leaving. You can't go in there."

"Oh, we can't, huh? Here."

A single glance at the paper shoved under his nose, and the gatekeeper came to life.

"Right this way, you're just in time."

The three ran out on top of the building, where the beautiful silver shape of the liner floated at the top of a short tower. An officer was just giving the command to cast loose, but as Holden shouted to him, he countermanded it, for special orders from the Union had to be obeyed, even if schedules were spoiled.

NODDING their thanks to the now obsequious gateman, the two scientists hurried up the ladder that had been dropped for them; again came the shouted "Cast off," and the huge liner, impelled by powerful motors, rose rapidly to the high altitude at which she traveled.

"Message for you, sir," said a pleasant voice at Holden's elbow, and he turned. A neatly uniformed boy held out to him a thin envelope. Breaking the seal, he read rapidly.

"'Will you show us in to the Captain, please," he addressed the boy as he finished the message.

The lad nodded, and led them down a long hall to the bow of the ship and up to the bridge.

"Mr. Holden, I presume? And Professor Erickson? I am Captain Linet."

The Captain was an immense man, well over six feet, with the build of a prizefighter. His face was pleasant, but there was an expression of intense sorrow in his deep blue eyes.

"I understand that you have been appointed to head an expedition to the moon, the nature of which has not been revealed, but which will do away forever with the earthquakes which have become so prevalent. I wish to join that expedition. My beloved wife was in New York at the time of the last quake. You understand."

Holden nodded sympathetically. He would be glad to have all the men like this he could find, and he expressed that opinion to the Captain.

"Thank you. I will resign my position when we reach San Francisco, and will await your orders."

"But, Captain," Holden asked, "how did you know that I was head of the expedition?"

"Oh, the news has been broadcast everywhere, with instructions to give you any aid possible. But no information was given as to the exact nature of the trip. Could I be trusted—?"

"Why certainly. We are going to destroy the moon, wipe it out of existence, so that it will cease to exert the tremendous gravitational pull that has been causing—."

At that moment a petty officer appeared behind the Captain.

"Have you any further orders concerning the cargo to be dumped at New Orleans?"

"No. I thought I gave you to understand that there were to be no more additions to that cargo. Didn't you hear me?"

"I beg your pardon, sir," the man said, and walked away.

"I wonder how much of our conversation he heard?" mused Erickson. "But then, I suppose it makes no difference."

After a few minutes of conversation, Holden asked the Captain if they could be shown their cabins, so that they could get a few hours of rest before reaching their destination. The request was readily granted, and in a few minutes Holden was alone in a neat little room, furnished with a comfortable chair, tables along two walls, and a very pleasant looking berth built into the third side. The professor had a similar place a few doors down the hall.

Holden threw off his shoes and coat and tumbled into the berth. The events of the last weeks were spinning in his head, and a procession of visions passed before his eyes. That terrible catastrophe, the trip to Europe, to the capitol of the World Union, and now, the appointment as leader of the most important expedition in the history of the universe, with the possible exception of that first epoch-making voyage to Mars back in 2350.

Another vision appeared before his eyes. Jean! Jean, his own sweetheart, the one person in the world who mattered, gone now for a full year. Why had she decided to make the voyage to Mars? What could have happened to the ill-fated *Gloriana*, with her hun-

dreds of passengers and valuable cargo? A year ago she had left; and, as some people said, merely drifted out into space, never to be heard from again.

A deep sob shook Holden's body as he thought of that beautiful girl, who, laughing at his fears, had stepped into the space flyer with a smile on her lips, promising to come back in a year and marry him.

At last, however, these memories gave way before exhaustion, and he fell into a sleep, troubled by strange dreams. It seemed that a great serpent had attacked him, and, flinging its coils about his body, was slowly squeezing out his life. Suddenly, he was wide awake. Strong hands were on his throat, the thumbs were pressed tight against his larynx.

He struggled to gain his breath, to shout for help, but the pressure closed his throat. In another moment it would be too late. Then his mind cleared; raising both hands to the back of his neck, he grasped the little fingers of his assailant, and pulled with all his strength. The man gave a cry of pain and anger and relaxed his grip. Holden gulped in a breath of air, and flung himself from his berth, endeavoring to catch and hold the coward who had attacked in the dark. The man, however, was wiry and quick. With a sudden jerk he wriggled loose, gained the door and was gone. When Holden reached the corridor, no one was in sight. Quickly he walked to Professor Erickson's room, awakened him, and told him what had happened.

Erickson rang up a steward, who promised to do everything in his power to apprehend the culprit.

"Who could it have been?" asked Erickson.

"I haven't the slightest idea. I have no enemies that I know of. I'm not carrying any valuables. It was probably a case of mistaken identity."

The incident was dismissed with that interpretation, and it was several weeks before Holden thought of it again, but then he wished fervently that he had investigated more thoroughly.

CHAPTER II

A Midnight Attack

IT WAS midnight when the liner reached San Francisco, but Holden insisted on going at once to the offices of the Interplanetary Transportation Company, where work was carried on day and night. Fortunately they found an official of the company who had sufficient power to carry out their instructions.

It is unnecessary to go into the details of the meeting, or of the ensuing days. The unlimited power given Holden, together with the vital importance of his mission, brought everyone into instant cooperation.

Three mammoth space ships were turned over to the gang of mechanics he had hired, to be fitted with projectors for the anti-gravitational screens. Thousands of chemists all over the world dropped their work to prepare the precious *hexozen* while others extracted Europium from the rare minerals in which it was found. Special freight ships were sent out to gather together the supply of these materials upon which the fate of the earth depended, and rapidly the great quantities of the chemical necessary were stored in the ships.

Captain Linet had proven true to his word, and, with his great executive ability, had made himself invaluable.

It was a pleasant sight to see the huge old Captain, veteran of many a storm in the air, conferring with the slim young Holden, whose pleasant features and soft voice gave no real notion of the immense energy, fiery courage and scientific knowledge which he possessed.

Crews for the three ships had to be assembled. Holden and Erickson picked many from among the scientific men of their acquaintance, all experts in their lines. The Interplanetary Transportation Company recommended several of their best men for the positions on board requiring technical knowledge of the handling of space ships, and Captain Linet also picked up a few of his friends—brave, strong men. There were to be fifty on each ship.

The start had been scheduled for the fifteenth of the month, but on the tenth Professor Erickson received a radiogram from the Seismographical Institute which read as follows: "Observations indicate a series of stresses approaching Pacific fault, probably aggravated by unusual tidal action of moon in that area tenth of next month."

"Gentlemen," the old professor addressed the little group gathered in the office alloted them in the I. T. C. building, "as you know, this is the tenth. Without allowing for possible delays, we would just have time, starting tomorrow, to reach the moon, distribute the *hexozen* and Europium and get out of range by the first. That would leave us only ten days for cutting the gaseous mass into small pieces which will drift harmlessly into space. If we do not have that task accomplished by the time indicated in this message, Los Angeles, San Francisco, Portland and Seattle will suffer the fate which overtook New York such a short time ago."

Holden's face was pale as he rose and nodded to the professor. "If Captain Linet will take the responsibility of getting the crews on board, I will see that we are ready to leave at high noon tomorrow."

The meeting adjourned in a flurry of papers, a ringing of bells, and brisk words spoken into television transmitters.

All that night and all the next morning work went on. At eleven A. M. the last five hundred tons of *hexozen* was loaded on the *San Francisco*, which was to be the flagship; at noon exactly the huge doors swung shut, the repulsion tubes at the stern began to glow, and the beautiful cigar-shaped ship rose from the earth, followed immediately by the *Los Angeles* and the *Ganymede*. They cruised slowly, at about six hundred miles per hour, until they were well out of the earth's atmosphere, when full power was slowly turned on, and the trip to the moon was actually begun.

Holden and Erickson stood in the bow of the *San Francisco*, watching the skilful hands of the pilot, Edwards, as he spun the dials controlling the steering discharges, keeping the delicate needle in the direction indicator exactly in line with the path indicated on the chart before him.

"How are things going, Edwards?" Holden asked.

"Fine so far. We have developed our necessary velocity in very good time. If you would allow me a word of advice, I would suggest that you turn in now, as the tremendous acceleration of the last few minutes, and the speed with which we are now traveling, are liable to affect you disagreeably, since this is your first trip. Our course has been plotted by the experts of the I. T. C., and there is nothing to do now but to stay on it."

HOLDEN decided that the suggestion was a good one, as he was beginning to feel light-headed and slightly bewildered. Erickson, however, chose to go down to the observation room, for a glance at the earth, and the two parted company in the hall which led through the storage compartments, located amidships.

As Holden continued on down the hall toward his

cabin, a sudden feeling of danger came over him. Memories of the clutching hands that had endeavored to throttle the life out of him shot into his mind. He laughed to himself, attributing the fear to the mental disorganization suffered by travelers on their first trip into space. He opened the door of his cabin, and stepped inside, instinctively reaching for the light-switch.

His hand encountered warm flesh! Swiftly he went into action, diving for the stranger's throat, but his unknown antagonist had the advantage of being prepared. Holden heard a soft swish, a tremendous weight seemed to descend on him, crushing his entire body. Buzzing lights flashed before his eyes. Then came darkness, and he sank, unconscious, to the floor.

"Jack, Jack, my boy." The voice came from a great distance, slowly penetrating the great cloud which hung over him. "Jack, what's the matter with you?" He realized that someone was talking to him. With a mighty effort, he opened his eyes and endeavored to distinguish the speaker among the thousands of objects which whirled before his eyes. At last things settled down, and he saw the anxious faces of Erickson and Captain Linet bending above him.

"Somebody was in my cabin, and slugged me over the head with a black-jack when I came in. Look at the wall-cabinet, will you, professor, and see if any of the papers are missing?"

The professor stepped over to one side of the room, and bent to examine the compartment set in the solid metal of the wall.

"Holden," he cried, "the intruder tried to open the cabinet, but was unable to do so, or else you came back sooner than he had expected. There are tool marks all around the lock."

"That means," exclaimed Captain Linet, "that the man either has tools in his cabin, or has access to the machine shop here on board."

Scarcely had he spoken when the floor leaped beneath their feet, a deafening roar sounded from the bow, and the lights went out. Sounds of running feet came from the corridor. The three men picked themselves up from the positions into which they had been thrown by the force of the shock, and rushed to the door.

The emergency lights had been switched on, and they could see fairly well by the dim illumination. They hurried into the pilot house at the bow. Edwards was struggling with the controls, pale but determined.

"There's something wrong with the steering apparatus; we've run into a group of tiny meteorites, but, thank God, they didn't hit hard enough to penetrate the shell. The other ships seem to be in good shape; they're standing by a few hundred miles away, for I've signaled them not to get themselves tangled up with this shower."

At that moment a breathless tube-man came running in.

"Report for you, sir, from the tube-room. Someone tampered with the timing device that controls the feeding of the charges. We can have it repaired in a few hours."

"Good," snapped Edwards. "Give me all the power you can from the emergency tubes, and keep the main stern tubes going full." Turning to Holden, he continued, "I'll try to steer out of this shower by means of the deceleration tubes, but I don't dare use up too much of their power, and they can't be recharged until after we land."

"Captain Linet," Holden ordered, "start a search of the ship. Go over every man's room first, and pay especial attention to their baggage. Read all the private papers you can find, and see if you can't get some clue as to why all this is being done. By the way, do we have any arms on board?"

Linet smiled. "While your orders didn't cover that matter, sir, I took the liberty to bring with me a very complete arsenal of small arms, and three of the newly developed rapid-fire disintegrators, using your *hexoxen* as the material for the bullets. Very effective, I may add."

"Fine. As soon as a man is searched, and has been entirely cleared of all shadow of suspicion, arm him."

Erickson departed with Captain Linet, and Holden remained in the pilot room, helping Edwards work the ship onward. After about an hour and a half, they had reached an area free from meteorites of dangerous size.

"I think I can handle her myself, now. Thanks very much," Edwards said, and Holden departed to do a little investigating on his own.

IN THE tube-room at the stern, he found Linet. The doughty Captain had evidently been giving the men a thorough raking over, for they were all looking slightly sheepish, as men do when they have had to reveal the most intimate details of their lives.

"All in shape here," Linet reported. "Five of the men I know best are searching the living quarters, under command of Professor Erickson. If you will come with me now, we will go to the observation room, where the rest of the men are loafing while off duty."

As they passed down the central hall in the section where the cabins were located, a man ran out from a side passage, saw them, and turned at full speed for the bow.

"Stop him," came a shout. Holden recognized the voice as Erickson's. The man heard it, too, for he whirled in his tracks, whipped an old-fashioned automatic pistol from his pocket, leveled it at Holden, and took careful aim. The fraction of a second during which his eye rested along the sights was his undoing.

Captain Linet's hand, hidden under the loose jacket he was wearing, pressed the release on his short-range ray pistol, a light bluish streak touched the man's breast, and he fell forward, his heart literally shattered by the energy of the ray.

Holden reached him first, and rolled him over. His face was faintly familiar, and doubt changed to recognition as Captain Linet exclaimed, "It's Chambers, a former petty officer on my airliner."

It was the man who had come up to the Captain while Holden and Erickson were conversing with him on the bridge.

"What on earth could the man have been up to? He must have been mad to attack me on this ship, with no chance of escape," exclaimed Holden. "Do you know anything of his record, Captain?"

"Nothing whatsoever, except that he seemed honest enough, and hard working. I was the one responsible for his presence on board here, as he had mentioned some knowledge of interplanetary travel, and we needed men."

Erickson had come up by that time.

"We found nothing in this man's cabin except some tools that he had evidently stolen from the machine shop, and a code book of the type used by commercial companies for interplanetary messages. He entered the room while we were searching it, and bolted when he saw us."

The thing was puzzling, but most of the men on board accepted the explanation that the man was mad,

and had for some reason resorted to desperate measures to assure the safety of the moon.

"You know," explained Captain Linet, "back a few hundred years ago, there was the expression 'moonstruck' applied to people who were mentally deranged."

At any rate, the incident was closed, as no one could be found who might possibly have been an accomplice. Minor damage caused by the cloud of meteorites was repaired, and the three ships swung in close together, heading for the satellite which they were commissioned to destroy.

The men spent as much time as they could in their bunks, for there was hard dangerous work ahead of them. Huge cartridges had to be filled with *hexoxen*, caps of Europium placed on top, and adjustments made so that, after a certain time had elapsed, the catalyst would come into contact with the *hexoxen*, causing a reaction to take place which would continue almost as long as there was solid material present to be vaporized. One slip of tired hands, one miscalculation and many men, perhaps the entire party, would suffer a terrible fate.

Holden was busy with one of the latest and best maps of the moon, looking for places where landing could be made, and charting the spots where the cartridges would be buried. The exact time for which every charge was to be set had to be worked out in advance.

CHAPTER III

A Sudden Encounter

THE map of the moon was not as complete as it could have been, either. No particular interest had been taken in our satellite since the first exploratory expeditions nearly fifty years before, when it had been determined that the moon was of no value to Earthmen, either as an outpost for colonization or a station for the production of power from the sun's rays. Jack did the best he could, however, and the little dots he placed on the map were close enough together to assure complete vaporization of the solid material in less than the allotted time.

At the end of the second day out, by earth-time, the dead satellite loomed immense, only five thousand miles ahead. Holden was in the pilot house when Edwards began turning on the deceleration tubes.

"I flashed your message to the other ships," he said, as his quick fingers touched the buttons which sent messages to the tube-room, "telling them to stand by and land with us. I understand that the plan is to use these ships to travel over the surface of the moon, making landings in such positions that expeditions can be sent out in four directions to plant cartridges. That will certainly give us plenty of time, if nothing goes wrong."

"I don't see what could go wrong," replied Holden, "since that madman is out of the way."

Eagerly he watched the dead, dust-covered surface approach, marveling at the huge craters and precipitous peaks.

In two hours the five thousand miles had been reduced to less than that many yards, and in a few more minutes the three great ships were settling softly on the smooth surface of the plain at the foot of Mount Julian.

Space suits were rapidly donned, the air-locks set in operation, and the men hastily began unloading the first four charges of *hexoxen* and Europium. Holden called a meeting of the ship commanders in the pilot room of the *San Francisco*.

"Commander Huges," he addressed the man in charge of the *Los Angeles*, "you will proceed toward Mount Locke, and continue in that line until you reach the spot marked on this chart, which is directly opposite our present position. Rogers, you take the *Ganymede*, and go at an angle of 120 degrees to Huges' course, toward Mount Zoga. I will continue over the Crater of Aristotle. We will keep in constant communication with each other by means of the space phone. Time the charges so that they will commence to react on the afternoon of the twenty-eighth, thus giving a sufficient margin of time in case of delays due to parties getting lost. That's all."

The *Ganymede* and the *Los Angeles* left almost immediately, while men from the *San Francisco* set out to plant the first charges. There were four men to each cartridge, since it was necessary that they travel fast.

Holden smiled as the lean figure of Professor Erickson, almost lost in his space-suit, bounded away in great leaps at the head of his party. In five hours they returned, having had no trouble at all. Edwards manipulated the controls, and the ship rose quickly to an altitude of about five thousand feet and headed for the rim of the Crater of Aristotle, barely visible in the distance. As they neared the rim, they rose higher and higher. The mammoth cliffs of black rock towered above them, and the meters registered a height of five miles as they passed through a crack in the cliffs and looked down on the level floor beneath them.

Suddenly Holden, who had been inspecting the country from one of the bow ports, uttered an exclamation of astonishment.

"A tiny ship is rising toward us from the floor of the crater, near the cliffs!"

There it was, a speck rapidly growing larger, headed straight for them, and gaining velocity with every foot it covered.

Edwards worked frantically with the controls, diving in a zig-zag path toward the strange craft. Captain Linet rushed in, carrying one of the light *hexoxen* guns. Holden hurried to help him place it in a specially designed aperture in the bow, while Erickson and the regular radio man endeavored to establish communications with the intruder. A voice suddenly spoke from their instrument.

"You will consider yourselves our captives. Land at once as close as possible to the white spot you see at the base of the cliff. If you do not obey instructions, we will ram you immediately."

"Don't reply for a moment," Holden commanded, focusing his glasses in the direction indicated. As the powerful lenses brought out every detail of the scene below, he paled visibly.

"What's the matter?" demanded Erickson.

"Matter enough," was the amazing reply. "We've run into a den of some bandits. They must be the fiends who have been preying on the Earth-Mars shipping!"

THE tremendous speed of the dive had brought them so close that all could see, without the aid of binoculars, the great skeletons of wrecked ships piled up at the base of the precipice.

"Tell those rats to go to hell," snapped Holden, "and get in touch with our own ships; use code and tell them to get here as quickly as possible, prepared for a fight. Get near enough to this pirate ship to open on it with the *hexoxen* guns. Can you keep them from ramming us, Edwards?"

"I think so, for a time, at least."

The enemy's craft was now only a few hundred yards away, and Holden scrutinized it closely for any sign that might give a clue to the original builders or

present owners. Not over a hundred and fifty feet in length, with no visible openings, it looked like a slightly fattened steel needle. Its stern tubes were of the ordinary type; they glowed red against the silvery background, as the enemy swooped and circled, trying to get into position for a final, crushing blow.

"Every man in space suits," Holden ordered. "Good work, Linet," he cried, as he saw a sudden pock-mark appear in the pirate's side, where the devastating *kexoxen* bullet had struck.

"They've certainly got thick plates," remarked the Captain, as another direct hit failed to do more than scratch the metal. "Probably heavier up in front, if they mean what they say about ramming. I'm going to concentrate on the stern."

The dull red surface of the moon, the black walls of the crater, and the twinkling stars of outer space mingled in a fantastic whirl as Edwards skilfully kept the *San Francisco* out of the enemy's reach, at the same time giving Linet and the men in the observation compartment sufficient opportunity to train their guns on vital spots. It was a hopeless game, though, for the smaller ship was incredibly fast.

Erickson straightened up from his position behind the operator of the space-phone. "We can't make any connections with either the *Ganymede* or the *Los Angeles*. Probably these pirates have developed a shield which, thrown around their victims, prevents any message from getting to the outside."

That looked bad. Erickson switched the receiver back to the wave-length of the enemy. A continual stream of taunts and threats came from the loudspeaker.

"Why don't you surrender?" the gruff voice barked. "You haven't a chance against us, but if you surrender you may be allowed to work with us, for your own benefit as well as ours."

"Go to hell, the formerly meek Erickson roared into the transmitter, surprised at his own rage.

Then finally, with a desperate dash, the tiny pirate ship darted in. Edwards did his best to swerve away from the needle-point, but in vain. There was a shattering crash; Holden felt himself hurled through the air, but his heavy space-suit saved him from being crushed as he hit the wall of the room. Edwards stayed with the controls, somehow, cursing savagely.

"Only a glancing blow, but it smashed all the main stern tubes, and evidently disabled the anti-gravitational shield transmitter. We're going down."

Holden dashed to a port and glanced out. A welcome sight met his eyes. The enemy, also injured, was heading for home as fast as his disabled engines permitted.

"Those *kexozen* bombs must have weakened his plating, so that it sprang when he rammed us," Edwards exclaimed when he saw what was happening.

Slowly the *San Francisco* sank toward the red and black volcanic ash of the crater floor. A hasty inspection revealed that Edwards had been correct in his diagnosis of the trouble. Extensive repairs would be necessary before they could proceed, but, fortunately, no one was seriously hurt, and the main shell showed no signs of strains or leaks.

As soon as Edwards had brought them safely to rest on the ground, Holden called a council of war.

"From the way these chaps fight, it's evident that they have no weapons, other than the bow of their ship, and possibly some short-range ray pistols, or the still more antiquated guns using some form of explosive to expel metal bullets. As soon as the shadow of the cliff throws this section of the crater into darkness, I'm going to do a little exploring, and see if I can't find out where these rats hide, when they're not out in space. Linet, you throw a line of pickets around the ship; Edwards, get started on repairs, and Erickson, keep on trying to get in touch with our companions."

SCARCELY had he finished speaking when the light began to fade, and in a few minutes it was pitch black. Refusing to take anyone along with him, Holden crept out of the air-lock, and with an occasional glance at the compass fastened inside his suit, always pointing toward the *San Francisco*, he set out in the general direction of the wrecked space ships he had seen piled along the base of the cliff. He made good time, despite the weight of his suit and the poor footing afforded by the loosely piled dust, and finally saw ahead of him the silvery gleam of a ship's side. Afraid to use his light, he crept toward the bow of the craft, past a huge hole, and reached the name-plate. Following the deeply engraved characters, he slowly spelled out the name "G-L-O-R-," his heart gave a great thump. *Gloriana*, the Earth-Mars passenger transport into which his own Jean had stepped so happily a year previously!

A sudden hope flared up and then died down as he remembered the gaping hole he had just passed. The cowards had probably attacked without warning; the terrible cold of outer space had flooded through the opening made by that sharp-pointed prow,—. He could not bear to carry the image further; with a sob in his throat and murderous hatred in his heart, he continued his search for the pirate stronghold.

Winding his way among other shattered ships, he came to the base of the towering cliff, and turned to the right along it, finding his way by constantly touching the hard rock with his gloved hand. Suddenly there was a space where he could touch nothing, then the texture of the material changed.

Carefully shielding the glow, he flashed a light on the wall for a moment. It was metal, not rock! The pirates had walled in a cave with plates from the captured transports; probably they were living within, in all the luxury of their stolen wealth.

A few yards farther on his searching hand touched a seam in the metal, still farther, another, evidently the air-lock through which the pirates took their ship into the cave. Holden sat down to think. At that moment the wall against which he leaned began to move slowly outward! A dim ray of light came from the opening, which, as he turned to look, he saw to be an air-lock. The inner door was closed, obviously someone was expected to enter. He drew a deep breath, clasped his gun firmly in his right hand, and plunged in.

As soon as he entered, the outer door closed; he heard valves click open, air rushed into the chamber, and the inner door slowly opened, revealing a long hall, dark and ominous.

Without removing the helmet of his space-suit, he started down the hall, but had gone no more than a few steps before he felt a hand on his sleeve, drawing him through a darkened doorway. The door closed, a light flashed on, and before him stood, smiling and happy, his sweetheart, Jean!

With a single movement he flung off his helmet and seized her in his arms. For a short, delicious moment she clung to him, whispering those words that lovers know so well. At last she said, "We haven't a minute to lose, Jack. Let me tell you all I know about this place."

"But Jean, how did you get here? How does it happen that you had access to the air-lock?"

"I was captured by these fiends, and am a prisoner,

together with about fifteen others, only five of them being men. All the rest were killed, either when the pirates rammed the ships, or here, when they decided the place was becoming crowded." Her face paled at the memory of the horrible massacres, but she went bravely on.

"We have no space-suits, and the pirates, of whom there are perhaps seventy-five, let us wander around pretty much as we please. We know of practically everything that goes on. I happened to hear your name mentioned in the phone room the other day, when a spy on your ship sent a message. When the pirates brought their ship in, crippled by the fight, I was sure that you were around somewhere. I have been watching ever since, making use of a sound detector pieced together from some scraps of material I picked up unnoticed.

"There aren't any guards because the gang is busy repairing the *Silver Death*, as they call their ship, preparatory to finishing the job they started today. Oh, Jack, you must go, now. They may be through at any time. I don't know when I will see you again, if ever, but I couldn't resist talking to you, touching you, just once more."

"One moment, dear. I have an idea. Is there any compartment, farther back or lower down, where you could gather the prisoners together, and be safe in case the outer wall was broken down?"

"YES," she replied breathlessly, "one of the older, smaller caves is still airtight, and while the gang is busy on the *Silver Death* we could go there and close the locks. What good would that do, though? They are certain you can't get in here, or they wouldn't leave the place unguarded. They have your ship surrounded by a wave-proof shield, so you can't communicate with the others of your fleet, you know."

"I know that, but I think I can steal a leaf from their own book. Will they all be working, say three hours from now?"

"I think so. Your guns did a great deal of damage, weakening the forward structures of their craft."

"All right. Get your friends together in the old cave you mentioned, seal it, and then wait till I come back."

Tenderly he kissed her good-bye, then hastened away, anxious to get his work done before the shadow of the cliff again receded.

Thanking the fates for the good fortune that had saved Jean, and had led her to the airlock at the moment he was there, he stumbled over the rocks and dust piles until halted by the picket line surrounding the *San Francisco*. He called the men into the ship, and hastened to the pilot room, where Edwards was testing the controls.

"Any luck?"

"Yes, a lot. Can you get the ship in shape to travel in three hours?"

"She's in pretty good shape now, although not capable of the trip back to Earth."

Captain Linet entered at that moment, and with him Professor Erickson.

Holden recounted his adventures of the last hour and then set forth his plan.

"The cave is walled up with thin plating from the ships the pirates have brought in here. The entire gang is at work, repairing their own flier; none of them, or at least only a few, are wearing space suits. I propose to drive the bow of the *San Francisco* into the wall of their cave, previously weakening it by a few bursts from the *hexoxen* guns!"

"It is possible," replied Edwards, "but it will probably put us out of commission altogether."

"In any case," put in Erickson, "we will be rid of this damnable shield, and can communicate with our companions."

It certainly was the only plan, for, as soon as the pirates had repaired their ship, another unequal battle would be waged, with the result very little in doubt.

All hands set to work completing repairs on the main stern tubes, the only ones necessary to drive the *San Francisco* forward. In less than three hours, Edwards pronounced the work done to his satisfaction.

As the light began to creep in toward the base of the cliff, the huge ship rose slightly off the ground, the tubes glowed red and, guided by a powerful searchlight installed on the bow, Edwards pointed his craft toward the gleaming metal patch that marked the position of the pirate cave.

At short range, Holden, Linet, and Erickson opened with the three *hexoxen* guns. They saw the bursts take effect on the metal. Edwards turned the power on full, and they felt the floor leaping under them. Would the bow of the *San Francisco* hold? Would they all be crushed to death at the impact? Another moment would tell. Holden saw the metal plates dead ahead, could distinguish the seams marking the air-lock.

He fired one final shot, and flung himself to the floor of the pilot room, endeavoring to find some means of bracing himself for the shock. Then it came! Torn from his position, he saw the plates buckling and heaving about him. The lights went out. A great crash sounded in his ears, and everything went black. In a moment he regained consciousness, and staggered to his feet, bruised and dizzy. Thank God, his space suit had not been harmed! A faint glow from the outside made things visible and he saw that the shock had torn a huge piece out of the plating of the pilot room.

A hand clutched his elbow, and through the phone in his space suit he heard Linet's voice.

"Erickson and Edwards are knocked out. Let's see what we did to these chaps here."

RUSHING back through the corridor, they collected as many of the crew as were able to move, flung open the heavy doors of the air-lock, and scrambled down to the floor of the cave.

Here and there lay bodies, pirates caught unawares. Suddenly Holden saw a blue flash. One of the mechanics clutched at his breast and fell, dead in an instant.

"Some of these fellows are still alive. They're using ray pistols," Holden shouted into his suit phone.

Even as he spoke he heard the sound of running feet from the darkness in the rear of the cave, where the bow of the *Silver Death* was barely visible in her cradle, and in a moment at least fifty figures, pirates who had somehow escaped the fatal cold of space, clad in clumsy suits and brandishing pistols, flung themselves desperately upon the smaller party.

Blue flashes were everywhere as the battle commenced, but the only sound was of struggling feet, with an occasional thud as a body hit the floor. The pirates had been weakened by their long stay on the moon, and moved slowly, but the surprise of their attack, and the superiority of numbers had given them some advantage. It was man to man fighting, savage and merciless.

Holden, with a neat dive, knocked the feet from under a huge fellow who had trained a pistol on him, and they rolled over and over, each trying desperately to gain a second's advantage. He heard a dull crash to one side, as Captain Linet, jumping high into the air, landed

with stunning force on a bewildered assailant. Thinking of Jean, waiting for him in some dim corner of the cave, he redoubled his efforts.

For a fraction of a second his pistol pointed toward his antagonist's body, and that was enough. He pressed the release, and the deadly ray shot into the body beneath him, dealing instant death. Freeing himself from the cold grip, he ducked an empty pistol flung at him by a new assailant. Again his finger bent, and another body dropped to join those lying motionless on the floor.

A fast-moving shadow caught his eye. He saw one of the pirates detach himself from a writhing group and head for the side of the cave. That was the place where Jean had said she would be waiting!

Pausing only an instant to make sure that his pistol was still charged, Holden sprang in pursuit of the fleeing form. He saw him stoop and pick up a heavy bar from the floor. The coward was going to burst open the chamber where the helpless captives waited! It was impossible to aim at that speed, so Holden forced his flying feet to move still faster, and foot by foot he drew closer to the man he pursued. Metal plates again gleamed in front of him, and he saw the pirate raise the bar high over his head, preparing for a blow which would crush the thin plates. The tiniest hole would mean death to the captives, who had no means of protecting themselves.

With one last desperate effort, Holden jumped, his Earth-trained muscles carrying him high into the air, while his pistol stabbed the partial darkness with vivid rays. Dodging and ducking, the pirate evaded the fatal stabs, while his bar beat a loud tattoo against the metal. Holden struck at him with his now useless pistol as he landed. The blow missed, and, losing his balance, he staggered and fell, past his foe, who quickly turned, raising his bar for a *coup de grace* which never landed. The familiar flash of a pistol once more illuminated the scene, the bar dropped from dead hands, and Holden scrambled to his feet.

A voice was speaking through his suit phone, and he recognized it as Erickson's. "I just came to, tumbled out of that hole in the pilot room, saw the flash of your pistol, and here I am."

The old professor appeared, wobbling slightly, but still game. The flashes toward the mouth of the cave had grown fewer. Leaving Erickson to guard the compartment of the captives, Holden hurried back to the fight. Even as he went, the flashes died out altogether, and he heard Linet's hearty voice in the phone. "Holden, where are you? We've cleaned out them all down here."

Light was now flooding in from outside, and bodies could be seen lying thick on the floor, cold and stiff in death. Sadly Holden recognized many of them as his own men. After a hasty conference with Linet, he gathered together fifteen space suits, and with an escort helping to carry them, he hurried back to Jean.

THE door of the air-lock opened as his party approached. They went in, heard the swish of air entering, and in a few minutes the inner door swung wide. A happy crowd of men and women surrounded them, as they rid themselves of their helmets. Holden felt Jean's arms around him, her sweet lips once more on his. For a second they clung together, then parted, for there was work to be done. The space suits were distributed and, as he led the way back to the *San Francisco*, Jean told him briefly the details of the long year of imprisonment.

"They gave us warning before they rammed us, as they wanted to save the women, for a purpose you can guess. Fortunately, there were never enough of us to go around, and these men, exiles from two planets, were always quarreling among themselves, so we were quite safe. We just existed, praying that some exploring expedition would find us, or that the *Silver Death* would meet a ship too strong for her to ram and, fleeing here for refuge, be trailed."

Holden sighted Captain Linet hurrying toward them. In the light now flooding the entire cavern, he could see lines of despair and hopelessness written over the florid face.

"What's the matter?"

"Matter enough," came the ominous answer. "The space phone on our ship is entirely disabled. We won't be able to get in touch with the *Ganymede* or the *Los Angeles*. In a few days, the *hexozen* charges they plant will commence to go off, and that will be the end of us."

Holden stopped, stunned by the news. Fleeting visions of happiness with Jean vanished into thin air. He would be destroyed by the chemical he had invented, with which he had hoped to save the world.

"I thought we might get out in the *Silver Death*," continued the captain, "but the entrance is entirely blocked by our own ship, and I'm afraid it will never move again."

Then Jean's clear voice cut in. "How about the space phone on the *Silver Death*? Won't it work?"

"Why, of course it will," laughed the captain, amused at his own stupidity.

Stumbling and tripping in their haste, the three hurried through the open air lock of the pirate craft, into the pilot room.

Holden feverishly set to work, whirling the strange dials, pushing this button, then that. At last a faint roar sounded in the loud speaker. Pressing his helmet against the transmitter, so that the vibrations would carry his voice, he shouted, "*Ganymede, Los Angeles*, Holden calling."

"What ho?" came a cheery voice, which he recognized as belonging to Huges, comm. nder of the *Los Angeles*.

Breathing a sigh of relief, he explained the situation. Busy days followed. *Hexozen* and Europium from the *San Francisco* were transferred to the other ships, with as much of the treasure collected by the pirates as could be loaded into the cramped quarters.

With Huges and Rogers assisting, Holden revised the schedule for planting the charges.

"We simply haven't time," he explained, "to set the charges as close together as I had planned. There's nothing to do but get all of them in that we can, and then hope that conditions in the interior of the moon will be of a nature to promote the action of the *hexozen*."

The ships' crews understood only too well the importance and danger of their work, and during the days that followed they toiled like a gang of madmen. Parties raced each other over the rough surface of the dead satellite, grimly determined that their efforts to save the world should not be in vain. Even the men of the party which had been rescued, weakened as they were by their long stay in the pirate cave, insisted on giving what help they could.

Finally came the day when the first charges were set to go off. Holden sat in the pilot room of the *Ganymede*, his eyes on the chronometer, while Captain Linet swept the desolate plain with powerful binoculars for the cloud of dust which would signal the return of the last party.

"Five minutes yet, Captain," Holden said in a low

voice. "Tell the *Los Angeles* to pull out. The first charges are scarcely two hundred miles from here, and I'm not certain how fast the reaction will travel."

Five minutes. Two minutes. The silver shape of the *Los Angeles* was already fading in the distance. Suddenly a sharp shock rocked the stony bed on which the *Ganymede* was resting. Simultaneously five figures appeared, racing at full speed for the ship. Shock after shock tore at the ground beneath their feet. Holden stood at the controls, waiting for the signal that his five comrades were safely aboard. To his tensed nerves it seemed hours before the welcome sound came to his ears, and with a sigh of relief he opened the power into the stern tubes, and laughed happily as the huge ship shot away from the heaving surface of the dying moon.

Anxious seconds passed. From the height to which they had risen, a great part of the moon was visible, and for the first time Holden realized the full power of the chemical which his ingenuity had devised. Immense tongues of flame ripped through the dust and rock of the satellite, sending dense clouds of vapor bellowing out into space. Mighty mountains disappeared in an instant.

The *Ganymede* was traveling at full speed, and yet it seemed as though at any moment the conflagration might reach out, consuming the space ship in that all-engulfing reaction. Holden manipulated the controls with flying fingers, seeking to get every available bit of speed from the metal monster which was carrying its precious cargo of human beings away from a terrible death.

Far ahead he could see the shape of the *Los Angeles*, now safely outside the danger zone. Thin clouds of vapor floated around the *Ganymede*, then suddenly cleared.

Captain Linet gave a shout of joy as he read the distance recorded on the dials. "Jack, my boy, we're safe. We're outside the limit to which the reaction can extend."

With the three ships playing their deadly beams on the moon, Holden watched the immense craters, the towering mountains, and the desolate plains of the moon slowly vaporize.

It was an awe-inspiring sight, as this dead world slowly melted into the nothingness of space, as though a disease of matter were wasting it inexorably away.

No doubt, on the earth, as the contours of the moon slowly blurred and became indistinct, with the accumulation of vapor around its now ragged rim, there must have been terror and consternation. And as the moon slowly evaporated in the skies a virtual panic must have ensued among the Earth's people.

The hand of a terrible fate, or the coming of the end of the world, must have been shouted from city to city as the only explanation of this apparent disaster in the heavens.

But the work had to go on . . .

For days, the *Ganymede* and the *Los Angeles* cruised through the thin clouds, spreading between them the anti-gravitational shield, while the sections of vapor, freed of their mutual attraction, drifted out into uncharted space.

It was slow, dangerous work, cutting those sections off from the main mass, and maintaining the proper position until they had floated off into space. Occasional particles of rock, small but deadly, clattered against the hard shell of the space ship. Fortunately, no fragments of appreciable size were encountered; the *hexoxen* had done its work thoroughly. For eight days the powerful ray sliced and repelled. Under its influence huge clouds of vapor, the ghostly remains of the calm globe which had innocently threatened the earth, hurtled off into the farthest reaches of space, there to sink at last into the substance of some flaming star.

At last the work was finished, and the two ships, saviors of the Earth, turned their bows toward home to carry to the awestruck people of Earth the glad news that interplanetary commerce would be as free of pirates thereafter as the Earth would be free of the disastrous quakes.

And Jack Holden, at last, faced with a light heart the honors that would be his, knowing that he could now share them with the girl of his dreams.

THE END.

Welcome to Mr. Brandt

IT IS with pleasure that I introduce to the readers of WONDER STORIES QUARTERLY an old friend, and one of the greatest living authorities on science fiction.

Mr. C. A. Brandt has, for many years, collected every available science fiction story in print that appeared in the English, French and German languages. He is thus an international authority on the subject.

In 1926, when I originated AMAZING STORIES, I engaged Mr. Brandt as Literary on the staff of that magazine, in which capacity he remained for a number of years.

With this issue, Mr. Brandt becomes Literary Editor of WONDER STORIES and WONDER STORIES QUARTERLY, and it will be the means to make these magazines still better as time rolls on.

C. A. BRANDT

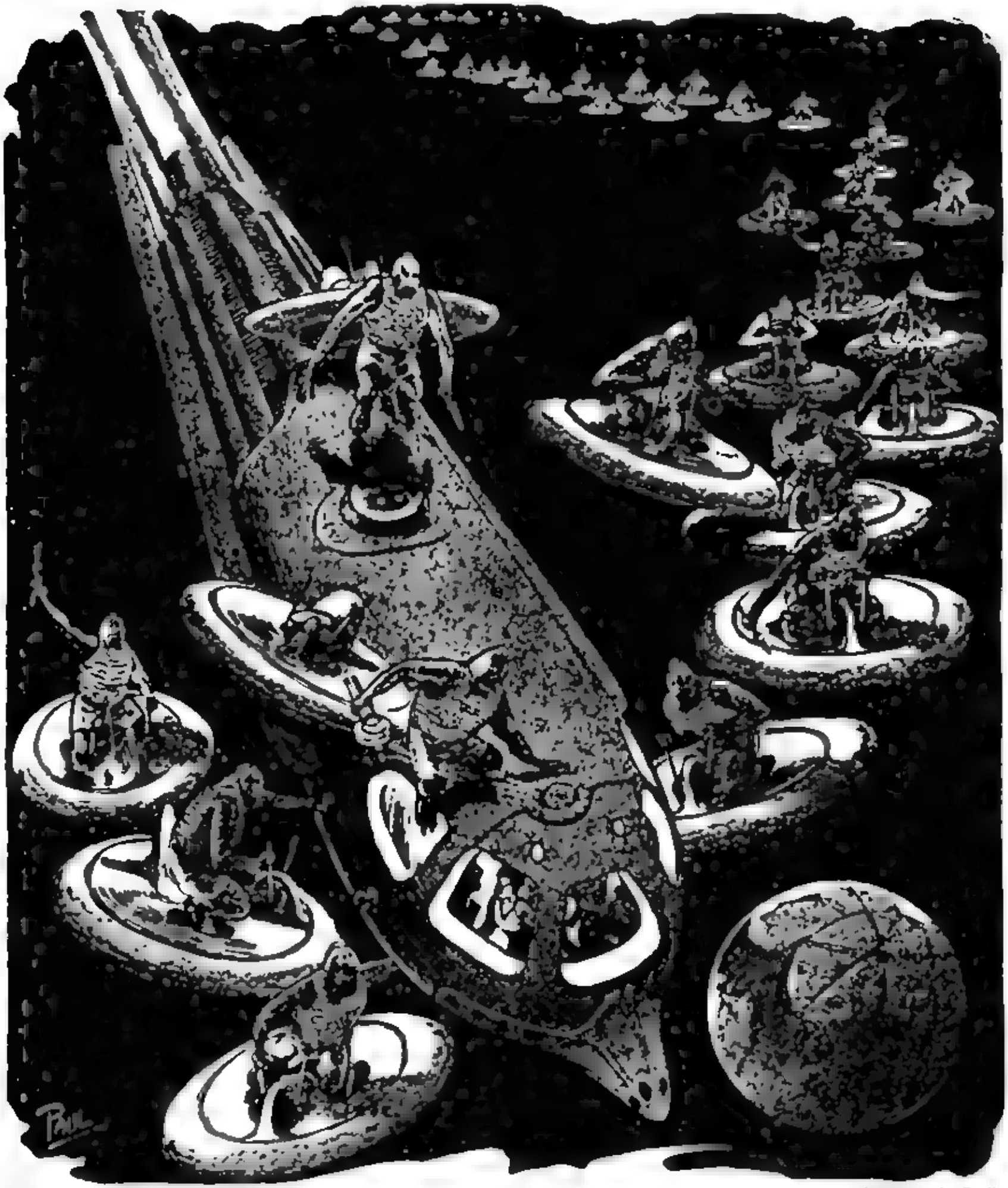
Having read everything that has gone before in science fiction, Mr. Brandt is an excellent critic on science fiction in all its phases, and I have always been able to rely on his clear judgment.

I am happy to welcome Mr. Brandt to WONDER STORIES and WONDER STORIES QUARTERLY, and I feel certain our readers will be glad to hear of the addition to our editorial board.

Hugo Gernsback

The Revolt of the Star Men

By RAYMOND GALLUN



(Illustration by Paul)

A bulk dropped down on the nose of the craft. A pair of hands gripped the barrels of the machine gun and tore them from the mountings.

THE REVOLT OF THE STAR MEN

By the Author of "The Space Dwellers"

IT WAS in the reading room of the Neilson-Aldebar space liner, *Ekova*, that two young people came unexpectedly upon a third person who sat alone, absently skimming through a copy of the *Interplanetarian*. When the girl caught sight of him she uttered a little exclamation of surprise. "Hekki—you!" she cried.

The one addressed looked up. A smile of greeting came over his swarthy, aristocratic features. "Hello, Jan. It is I—none other," he said. "Aren't you glad to see me?" Here he shot a quick glance at the girl's companion.

"Why certainly I am, Hekki," she replied a trifle nervously. "But how can it be? A week ago you left for the deepest, most mysterious part of the Taraal desert on Mars, to collect objects of ancient art, and now you are here. Where have you kept yourself during the voyage?"

The other smiled again—this time a cryptic, secretive smile. "Business," he said mysteriously. "It called me to Earth at the last moment, and since we left the docks at Taboor, it has kept me occupied in my stateroom. This is but the third time I have ventured out of it. Alka brought me my meals." Hekki arched his finely penciled eyebrows slightly as he looked up at the lady's companion. "And you too have had business, Janice," he added. "A new boy friend?" There was a hint of something unpleasant in his tone, but the girl ignored it.

She nodded her golden head. "We met on the night of the departure from Mars, and since then, we've had a happy week together. Austin," she said, turning to the youth, "I want you to know Hekalu Selba of Taboor. Hekki, this is Austin Shelby, who hails from Chicago. You ought to get along well together, because you are both so interested in mechanics," she added. The men shook hands. For the past few moments Shelby had been trying to analyze from the scanty data at hand the character of Hekki. He saw the tapering, effeminate hands—one twiddled nervously a long Martian cigarette—the dark straight hair and fine features; the mouth, that could curl so insolently; the faultless, white silk clothing.

Shelby decided that he did not like Hekki. The reason at first seemed obvious, but presently the young Earthman realized that his feeling towards this child of the Red Planet was stronger than mere dislike. What was the explanation? Was it because Hekki was a friend of Janice Darell? Since he had met her aboard the *Ekova* on this glorious return to Earth, after having spent a whole Martian year at an engineering school at Taboor, Shelby had learned to know love. Was he jealous of this noble of another world? A little, perhaps. But this did not account for the vague, sinister aura he sensed about Hekalu Selba.

Something in Shelby's brain was trying to surge its way to the surface of his consciousness; he struggled with it, and it came out clear. Only thirty-six hours before, during the period designated for sleep, he had wandered into a seldom frequented passageway, high up in the hull of the *Ekova*. Here there were portholes through which he could see the curving metal expanse of the ship's huge form, gleaming dimly under the stars of space. It had looked like the back of a great silver whale.

For a minute or two he had stared absently through the little circular window, and then, hearing footsteps down the corridor, he had turned to see two figures some hundred feet distant moving away from him. They had obviously entered from a side passage and had probably not seen him. One had been this very Hekalu Selba; Austin was sure of it. Beside him had moved a shadow. The Earthman had not seen it clearly, for the illuminating globes burning here during the sleep period were dim and far between.

He had but a vague fleeting impression of a huge knotty form, bent and grotesque. Its arms were so long that its big hands almost dragged on the floor. Its head was very large and bulbous. The pair had seemed to carry something heavy between them, but Austin had not seen what it was. In a moment the Martian had opened a door in the side of

RAYMOND GALLUN

THE creatures that people this exciting story of Mr. Gallun, may seem at first blush to be impossible monstrosities. Yet, on consideration, we must realize that they are not so far-fetched.

Even in our picayune little corner of the universe, we find in the insect kingdom a form of life that has survived through every possible earth catastrophe in the last 40,000,000 years. With their skeletons on the outside of their bodies instead of on the inside, insects are able to protect their bodies from heat, cold, and from accidents that would kill us. If the insect's shell were harder and thicker and made of heat-resisting material, it might conceivably be able to live in space without other protection.

The point is that Mr. Gallun makes his Space Men so convincing that we can do nothing but believe in them. And he has woven about them such a thrilling story of adventure on two worlds that one will have to read and reread it, to get from it the fullest enjoyment.

the passage and the two had vanished into it.

When Austin had returned to his stateroom, he was not quite sure he had really seen the monstrous horror. Surely nothing like it was known to exist within the orbit of Jupiter! Shelby had thought of reporting the incident to the commander of the vessel, but he had dismissed the idea as too pointless. Now, however, the memory of that vague black form was haunting him. He knew that it was the key, in part at least, to his feeling toward Hekalu Selba.

The Martian had cast his magazine aside. He was patting the soft cushions of the divan on which he was lounging. "Sit here, my friends," he said in his smooth, precise English. "We shall talk, and then perhaps we shall have a little refreshment." The two complied.

"It will be only for a moment," said the girl. "The ship lands in an hour, and I haven't gathered my things together yet."

Shelby was intensely interested in this queer individual, about whose personality there lingered a strangely indefinable web of mystery—of evil, almost.

"So you too have a passion for mechanics," he said. "Somewhere I am sure I have heard of you before. Kelang Aggar, an instructor of mine at Taboor, spoke occasionally of a young Martian student—"

"Kelang Aggar is my friend," Hekki broke in. "He assisted me with several experiments. But they were nothing—a new alloy, very hard, and having a high point of fusion. The heads of the Space Ship Construction Company said it was ideal for rocket nozzles, but they paid me a mere pittance for the invention. This, and a few even lesser ones are my sole accomplishments in the line of mechanics." Hekalu Selba laughed lightly.

"Let us talk of other things, my friends," he continued. "Let us allow our minds to ramble. See those two beautiful potted palms over there—children of the deserts of Earth, and beside them the slender graceful stem of the purple Kelan, dug from the marshes along the Selgur waterway of my own planet. I have seen them both in their native habitat, waving their fronds as though in cadence with some great silent symphony of the universe. See that tapestry over yonder, with the beast woven into it?"

HERE Janice Darell pointed up toward the flattened glass dome that roofed the room. "There is old Mother Earth looking down at us, and the sun is peeping around her rim," she said. "See how the light of Sol sifts through the terrestrial atmosphere. There is a streak of red, of gold, of opal, and beyond are the stars and the blackness of space."

"The contrast of the forces of darkness with those of light," Shelby put in softly.

Hekki was smiling absently. "There are many contrasts," he mused. "The contrast of life and death, of power and weakness, of nightmare and reality."

Words popped into Austin Shelby's head, and, carelessly, he uttered them without thinking: "You often walk with your nightmares, don't you, Hekalu?"

A hard light came into the Martian's eyes as he stared straight at the Earthman. "Perhaps," he said, "and you, Mr. Shelby, often walk in your sleep!" But apparently the incident was immediately forgotten.

Austin wondered how much the girl knew about the luxurious Hekalu. A quick glance of intelligence passed between them.

"I'll have to pack now," Janice said. "Won't you boys walk along with me a little ways?" She took Austin's arm as they arose. Hekki fell in beside them. At the entrance to the corridor which led to the girl's stateroom they paused.

"My business will occupy me tonight and tomorrow," said Hekalu, "so I shall bid yo goodbye until, let us say, the following evening, Jan, but if you like I shall have Alka take you home."

"Mr. Shelby has asked permission to perform that little service, you industrious old business man," she replied mischievously. And again that dark shadow flickered momentarily on the Martian's features.

"But you will let me see you the day after tomorrow?" he asked. "I have found a little paradise out at Oak Park patterned after the fairy palaces of my own planet, and besides, I have a new jewel to show you."

"Fie on your jewels, Hekki," she smiled, adopting the stiff trite speech the Martians often fell into. "But anyway, perhaps I shall favor you with my incomparable company. The time you mention is still a ways away. *Sidi yadi,** my friend. Remember I shall be expecting a view-phone call from you soon." Then turning to Shelby: "I'll meet you in the lounge right after the boat lands. Don't fail me!"

"You needn't worry about that, Jan," he assured her.

In a moment she was hurrying up the corridor in the pink glow of the lights. As Austin gazed after her, he could not help but think how wonderful was this fluffy little wisp of blonde beauty. Was she for him? Over her he felt there lurked a dark shadow, but this only strengthened the spell she had cast over him, for it gave to him the pleasure which virile males experience when they know that their loved one requires protection.

Hekki cleared his throat to attract the attention of his companion. When Shelby turned toward him he was fumbling in one of the voluminous sleeve pockets of his blouse. Presently he drew forth a very thin rectangle of a substance resembling ivory, and handed it to the Earthman. Shelby glanced at it. It was one of the name cards commonly used by Martian men. It bore the legend in the interplanetary symbols:

Hekalu Selba, Akar
414 Teldasa
Taboor, P. 4.

Beneath in small letters appeared Hekki's Chicago address.

"I shall want to see you again soon, my friend," said the Martian cordially. "There are many things at my establishment which I would like to show you—much that we can talk about."

Austin Shelby accepted the card and handed Hekki his own. Here was an opportunity to get some first hand information on the mysterious man of Mars and his more mysterious, perhaps sinister doings. The idea that he might be placing himself in a dangerous position, Shelby gave scarcely a moment's thought, for he had in him the spirit of the adventurer.

"Thank you, Akar Hekalu. I shall get in touch with you. And in the meanwhile you can reach me at my address through the view-phone at almost any time for I shall be working on a new mechanism there. *Sidi yadi.*"

"*Sidi yadi*, my friend."

The two men parted.

FIFTEEN minutes later a rustling whisper was audible throughout the *Ekova*, above the steady purr of the forward-pointing decelerating rockets. It became a deep-toned soughing which rapidly increased in volume to a loud roar, and then to a screeching hiss. The ship swayed and rocked a little. It was tearing its way into the terrestrial atmosphere.

*Martian farewell.

In the conning tower forward, the pilot and his assistant were working calmly and cooly over the bewildering array of controlling mechanisms. Getting those thousands of tons of metal safely lowered into a space ship's cradle on the landing stage, was a difficult task, but the experience and efficiency of the two men was quite competent to cope with it.

Far below was a vast sea of winking lights—Chicago, its colossal skyscrapers looming up severe and white and beautiful in the glow.

The pilot's nimble fingers turned a small horizontal wheel at his side. The liner dipped and dropped slowly earthward toward an area of white light. A mass of cloud poured over the huge hull for an instant and then passed by. The outer shell of the great silvery whale which had been chilled to a degree from absolute zero, by the cold of space had been warmed but slightly by the rapid passage through the atmosphere and now gleamed with jewel-like hoar frost.

Down, down it floated until it was only three hundred feet above the landing stage. A red signal light gleamed suddenly on a panel within the control room, and the wizard of that eerie chamber shifted a tiny lever. The space ship halted and hung motionless supported by its repulsion plates. On the ground in the glare of floodlights white-clad men hurried about. Four mighty arms of metal groped upward from a mass of heavy framework. They clutched the craft with a grating noise, and then, with the slow deliberation of a sleepy giant, they drew it gently down into its cradle.

Within the *Ekova* all was abustle. Its doors, built solidly like the breeches of big cannons, swung open, permitting the cool night air to enter the ship, which for seven days had been a world sufficient unto itself. Gangplanks were let down, and the passengers, jesting gaily with one another began their leisurely descent to the ground. Customs officials worked feverishly. A webby derrick arm pointing out from an opening in the side of the liner, was unloading mail and costly material and equipment sent to Earth from the Red Planet.

The routine processes of debarkation over, Shelby and Janice Darell entered the covered causeway which led to the great terminal building of the Space Travel Company.

The two had caught but a fleeting glimpse of Hekki. He was talking earnestly to a white-clad official, and had not seen them; nor had they tried to attract his attention. Conspicuous among the Martian's numerous possessions was a large basket of metal wickerwork, such as were commonly used to convey dogs and similiar pets from place to place. The sight of that basket had aroused again in Shelby's mind that peculiar sense of the presence of something sinister. Was the monster he had seen in Hekalu Selba's company hidden within that case of woven wire?

Within the causeway was a moving walk which carried Shelby and his companion to the depot. Here the intermittent whirring of pneumatic tube-cars operating in a vast network throughout the city was audible. The young Earthian pair, and the two attendants bearing their light luggage entered an elevator, which carried them swiftly to the landing platform for atmospheric craft on the roof of the building.

Shelby presented his identification tag and gave the number of his plane to the official in charge. The man led the way to a hangar at the side of the platform. Shelby had sent an order by radio to the Sutherland Aircraft Company a few hours before, and, complying with his request, a bright new flier had been delivered and housed here, awaiting his arrival.

The official closed a switch on the wall of the building, and the hangar door rolled open. While the two Earthians were entering the craft the attendants quickly placed the luggage into the load compartment.

Shelby fumbled with the destination mechanism and pressed the starting lever. The propellers, whirled at high speed by the soundless atomic motor, thrummed softly. In a moment, the plane, unguided by human hands, hoisted itself almost vertically into the night and was off. Unerringly it would carry its occupants to their destination.

CHAPTER II
A Strange Story

SHELBY looked down at his companion. For a time she had been strangely quiet. Could it be that there was just a hint of a troubled look on her beautiful face? The young engineer felt himself drawn to her more than ever. He wanted to know more about his new Martian acquaintance, but he disliked to ask a direct question concerning him, for he feared vaguely that it might give her offense.

"Jan," he said, "you look worried. Is anything wrong?"

She shook her head, slowly, absently, without looking at him. "No, I was just thinking." She paused, and then in the same absent manner she continued: "Only Hekalu Selba is back, and I thought I was rid of him."

Reassured somewhat by her words, but still taking care to conceal any hint of the menace he had sensed about the Martian, Shelby asked: "What possible difference can his presence in Chicago mean to you? He seemed to me to be a very ordinary Martian nobleman—evidently supplied with plenty of money, and having no other motive in life than to enjoy himself, and perhaps to help others enjoy themselves. A perfectly harmless individual."

Janice's face grew serious. "You say those things because you do not know Hekki," she said. "Shall I tell you about him? It would relieve me to share my knowledge with someone."

The young man nodded but made no comment.

"Two years ago," she began, "I went to Taboor on Mars to study sculpture. Not long after my arrival at school, in the company of a number of other art students, I attended a ball given at a glorious old palace in the heart of the ancient Martian quarter. Our gracious host was Hekalu Selba himself. I met him, danced with him, and talked with him. From the first he was attracted to me and I to him, and so we were often together.

"Though some of his peculiar affectations were obnoxious to me, I thought that his good qualities far overbalanced his failings. He seemed always kind and considerate in his dealings with all about him; he was well informed on almost every possible subject; he painted pictures and played various musical instruments with a skill that was little short of genius, and his tales of his travels and adventures in the little-known region beyond the orbits of the minor planets could not fail to delight any listeners. Dreamer and brilliant artist—that was Hekki as I saw him then. Effeminate—yes, but brave and resourceful too.

"Our intimacy grew. He made frequent proposals of marriage to me, but I put him off, saying that I was not sure I loved him. I informed Father back here in Chicago of our friendship. His next letter showed plainly his enthusiasm over the idea of the possible marriage of his daughter with this young noble of the ancient Martian house of Selba. 'Get him, Jan,' he wrote. 'He'd be the catch of a lifetime. Why, his total

assets would make the treasure of Croesus look like a little piece of twisted copper wire.' Poor practical old Dad! For once his business judgment was in the wrong. It was well that I did not follow his advice."

At this point Jan's story was interrupted by the sudden dropping of the plane. They had reached their destination. The craft descended vertically and landed with a light impact in the center of a small private roof garden at the summit of a great apartment building.

"Dad won't be home now," said Jan. "He was delayed in New York, and will not appear until tomorrow. There isn't anyone else around here except old Rufus, so we needn't go down stairs. Let's sit over there instead." She pointed toward a quaintly wrought bench beside a splashing fountain. The moon was shining, and the solitary cypress tree cast a spear-like shadow over the pool. There was a faint fragrance of flowers in the night.

Janice and Shelby seated themselves and the girl continued:

"Shortly after my meeting with Hekalu Selba rumors began to come to me. Men died mysteriously, and there were people who made vague hints that my noble friend was responsible. An uncle of Hekki's had made him the principal heir to his fortune—shortly afterward the uncle contracted a virulent disease and passed away. On both planets men that were obnoxious to Hekki were murdered—capable business rivals and people who perhaps 'knew too much.' Always the circumstances of their deaths were peculiar. Frequently they were found in locked rooms to which an assassin could scarcely have gained entrance without breaking his way. But such violent methods had not been used. Never was there a shred of evidence to implicate the noble.

"BUT I was beginning to see Hekalu's true color. The lavish display of his wealth—his estates and his art treasures, and the endless round of good times he sought to provide, were merely an attempt to cover up his wickedness. One afternoon that I was with him, he was under the influence of the Elar drug. His face was red and his eyes gleamed with a wicked light. He proposed to me again, and when I made an angry refusal he threatened me—said that if there was another whom I loved he would destroy him and me too.

"That, I assured myself, was the end. Hekki tried to make up, but when he found that I would have nothing to do with him he vanished. I think he went off into the outer regions of the solar system again. He was gone for a long time, and I devoted myself entirely to my studies.

"Then suddenly, out of the blue, I received a letter from Hekki. It came from a small village far to the west of Taboor. A gift accompanied it. Hekki informed me that in a valley far out in the unexplored Taraal desert he had run across a ruined city built by the Melbar kings some seventy-five thousand years ago. He hoped to make an enormous fortune from the art treasures he had found there.

"The gift and the small photograph he sent me, I shall show you at the first opportunity. They are packed away now. The former is a dagger with a flexible blade of a shiny black substance unknown to me. It does not seem to be metal. The hilt is a lump of platinum. It is carved to represent some strange animal with scores of coiling tentacles. Hekki says that the object is one of his treasures, found on the site of the ancient city. But I have doubted this. I know something of the art of the Melbar kings, and certainly the dagger does not resemble the products of their craftsmen. The same is true of those wares of Hekki's which my friends have bought. They are strange—belonging neither to Earth nor Mars.

"The picture too is equally puzzling. It depicts a night scene in a desert valley. Jagged hills in the distance and the nearer moon of Mars in the sky. The floor of the valley is in shadow and things there are indistinct. There are shapes there—vast shapes, odd and grotesque. And there is something in the foreground which might be almost human!

"In his letter Hekki asked if he might see me again, and I immediately wrote and told him that I would. To you, Austin, this probably seems a crazy thing to do, but like most everyone who is young, I had a genuine love for intrigue and mystery, even though they might be dangerous things to meddle with.

"Hekalu came to Taboor, but I saw comparatively little of him. He seemed always to be tremendously busy. Sometimes he would be extravagantly jubilant, as though he had met with some tremendous success, or again he would apparently be worried almost to the point of madness. What these emotional changes meant, he would never tell me.

"Several times old Alka, his favorite slave, spoke to me. 'The Master is not as he used to be, Miss Darell,' he would say. 'He works feverishly with odd mechanisms, and every night when he is at home he stares out into space toward the farther planets with his new super-telescope. Always, what he sees makes his face turn white and hard; sometimes, he smiles and sometimes his features look like a devil's mask.'

"And still Hekki's weird treasures continued, and still continue to come from the Taraal.

"A group of men was sent by the heads of the Place of Knowledge out into the desert to investigate. They disappeared. The officials of the Planetary Patrol made only a hasty and unsuccessful investigation.

"On the day of my departure from Mars, after having finished my course, I saw Hekki, believing that it was for the last time. He said he was going back into the Taraal. And then he popped up on the liner. And that, Austin, is all I know about Hekalu Selba. What do you make of it? What is he trying to do out there in the desert?" She placed her hand lightly on Shelby's arm and looked up appealingly into his face. "Can't you offer some suggestions, Austin? You know that when suspicious events are troubling you, a plausible explanation eases your mind even though you cannot know the truth. And I am afraid, afraid that he is deliberately following me to Earth!"

While Jan had been telling of her acquaintance with the Martian, Austin had been staring at a very large Sadu moth which hovered, and leisurely moved about on thrumming gorgeous wings, which spanned fully eighteen inches. It moved from blossom to blossom in a nearby flower bed, delicately sipping nectar. Always its great luminous eyes, which glowed like coals of gleaming fire, were turned toward the pair. Shelby had scarcely noticed it, for he was absorbed with the girl's account; but now, when it edged closer towards them, and then made a sudden mischievous swoop not six inches above their heads, its presence could no longer be ignored. The girl gave an exclamation of revulsion and shrank involuntarily toward her companion. He leaped to his feet, and picking up a pebble from beside the fountain, hurled it at the night prowler.

"You dirty eavesdropper!" he shouted angrily. "The man who brought your kind from Mars for ornamental purposes must have been crazy!"

THE moth buzzed up into the cypress tree and squatted there, silently, apparently resting. Only its eyes continued to glare fixedly, almost malignantly at the occupants of the garden. But they quickly forgot about its presence.

"I don't know whether I can offer a sensible explanation for Hekalu's actions or not, Jan," Shelby said. "However, as far as his activities in the Taraal are concerned, it seems quite possible that he did discover ruins there, and is trying to keep other fortune seekers away. The ruins may of course not really belong to the Melbar dynasty. They might have been built by some contemporary race. Just what he is doing among the minor planets, we can't any more than guess at. Probably he's just adventuring like a few other people. And as for his following you to Earth—well, I admit that you *do* seem to be popular!"

"You're making it sound awfully simple, Austin," said Jan. She paused and thought for a moment, and then, with seeming irrelevance she continued: "Haven't you heard of queer clusters of luminous specks recently seen by astronomers not far beyond Mars? They called them meteor clusters, but they drifted about here and there, not following definite paths as meteors should do."

"You're trying to suggest that they are space ships, aren't you, Jan?"

She nodded.

"But they aren't," Shelby assured her. "They don't polarize the reflected light of the sun as space ships do. Besides, where could they have been built? Certainly not among the planetoids. And any place on the planets, the Taraal desert for instance, would be an almost equally impossible site for their construction.

"Think of the enormous crews of men and the vast supplies of food and water and materials that would have to be taken out there into the wilderness. Undoubtedly Hekalu could back such a project financially, but he would be discovered before he had made a fair start, and the Martian Planet Patrol would wipe him out of existence. Still, though I don't think that the luminous specks are man-built vessels, I am equally certain that they aren't meteors either."

"Then what are they?"

The young man smiled and shrugged. "I don't know," he said. The intuitive feeling that unknown, and not too beneficient forces were at work in the ether about, was troubling him again, making his scalp muscles tingle.

For a moment Shelby stared at the ground. "Jan," he said, "I didn't tell you what I saw on the liner. I didn't tell anyone because I don't want to be called a lunatic. But I guess it's all right to let you in on this now. Briefly, during the sleep period, I came upon Hekalu Selba prowling in a passageway aboard the *Ekova*, in the company of a vague thing that may have been similar to that shape in the photograph—long arms, big head, squat and muscular. If we knew what that thing was, and where it came from, the snarl might be half untangled."

Janice Darell's face took on a sudden surprised look. "You actually saw what you say you saw?" she cried. When her companion nodded, she continued excitedly with wide-open eyes. "I still believe that Hekalu knows something about the meteor cluster. And the beast figures in somewhere too. Austin," she cried, "what if Hekki is trying something really great? I know you don't take stock in any such idea, but just supposing he is—what if—"

"Let him try!" the young man cut in. "I almost wish he would! I'm afraid he would get the surprise of his life." He was staring straight at the unwinking, malignant eyes of the Sadu moth.

"What do you mean?"

Shelby drew a small black case from his sleeve pocket and opened it. He took from it a device which looked like a tiny pistol. There were several other odds and ends of mechanisms in the case. "For a year I have been working on a new weapon," he said. "All the parts are completed, and tonight I shall finish assembling them. This little gun is the projector for a new ray which I have discovered—an etheric vibration of extremely short wavelength. A portion of the atomic energy in any solid or liquid substance the ray touches is instantly released.

"You doubt whether it is effective? Well, I can't give you any proof now; I can only say that when I was back on Mars, fooling with my first cumbersome projector, which produced only the weakest of vibrations. I blasted a big hole in the wall of my apartment, and nearly killed the Martian physician who lived in the rooms next to mine. I had a devil of a time explaining the explosion, and narrowly missed getting myself into serious trouble. In a few days I shall try to sell the weapon to the Earth Government. If they are convinced of its value, and I don't see how they can help but be convinced, our friend from the Red Planet will have to be very careful if he tries anything."

Shelby glanced at his wrist watch. "Eleven thirty—my bed time," he said with mock seriousness. "But Jan, there's one favor I want to ask you before I go. Try not to see anymore of Hekalu Selba, Akar."

Janice Darell made a valiant attempt to act the part of one whose pride and sense of freedom had been deeply outraged. "Mr. Shelby," she said, "what right have you to tell me what I shall or shall not do?" But a light laugh broke from her lips and spoiled her bluff.

"There are two reasons," replied her companion seriously. "First, because we both believe that Hekalu Selba is dangerous; second—because I love you." He leaned closer toward her with the light of eagerness in his eyes. "Oh, I know I'm crude, Jan," he said passionately. "I'm just a clumsy engineer, not a poet or ladies' man. What I'm trying to say to you must seem awfully trite, but anyway, I want you with me always."

"You mean—?"

He nodded.

"All right, Austin," she said quietly, looking straight into his eyes.

His arms crept around her, and now he drew her gently to him.

Some moments later, in the nearby pergola, the door which led to the rooms below opened, and an ancient negro clad in gaudy pajamas and bathrobe peered out into the garden. He saw the pair and recognized the girl. A happy grin came over his wrinkled black face. "Well, if dat ain't a mos' pretty sight to look at," he muttered. "My baby done come back at las', and dat sho' am a han'some boy she got dar!" He turned, and leaving the door open and the light burning on the stair, descended. Very softly and wistfully he was crooning an old darky love song.

It was an hour later before Shelby's craft whirred up into the moon-bathed night over the winking lights of the city. And at the same time the big-eyed Sadu moth which had been crouching in the cypress tree, rose on its velvety wings and sped away, as though some urgent mission had suddenly claimed its attention.

CHAPTER III

Hekki's Proposal

WHEN Shelby reached his apartment, he immediately donned his laboratory smock and set to work. But he had scarcely finished mounting a tiny coil of wire within the hand-grip of his weapon, when the view-phone bell rang insistently.

The inventor pulled off his smock and threw it over the materials on his work bench, so that the person at the other end of the view-phone connection, whoever it was, would not be able to see them. Then he snapped the television and audio switches. The mists in the view-plate cleared, and there before him, as real as though he were actually in the room, sat Hekalu Selba. The Martian's eyes gleamed with suppressed excitement.

"Mr. Shelby," he was saying, "it may seem strange that I should be calling you so soon, but I have something simply colossal to talk over with you. You must come up to my place immediately! I realize that you may be very busy, but this is important!" And he added, "It's nothing to discuss over the view-phone Will you come?—please!"

Shelby was about to make a cold reply, but he checked himself. An intense curiosity gripped him.

"All right, Akar Hekalu," he said. "I'll be there." The switches clicked.

Hastily Austin changed to his street clothes, and then gathered together the material for his weapon and placed them in the wall safe. Only one thing he selected from the jumble of appartus—a tiny pinkish crystal, without which it was impossible to produce the Atomic Ray. This he secreted in a hollow button on his sleeve.

For a long moment he stared at his automatic, which lay on his work bench. "Better take you along," he muttered at length, "—may need you."

A wizened black-clad man whom Shelby surmised was the slave Alka, met him at the entrance on the landing platform of a quaint Martian tower atop a huge apartment building, and ushered him into an elevator. He was whisked rapidly downward, and emerged into the central light-well which pierced the structure from top to bottom. The barbaric tapestries upon the walls of this tall cylindrical chamber, the tiling of the floor, which consisted of squares and circles and spear points of various colored stone, fitted artfully together, giving an effect of pleasant disorder. And most of all, the smell of strange incense in the air, told Shelby that he had dropped into a little bit of old Pagar or Mars. Evidently the Prince of Selba was master of the entire tower, which, in itself, was by no means small.

Alka led the way down a short passage, and admitted the Earthman to a large sumptuously furnished room, one end of which was softly illuminated by a quaintly beautiful floor lamp. The farther end of the room was in complete darkness. The Pagarian architects had made it imitate the interior of a natural cavern, for where the light approached the gloom, two glassy stalactites gleamed with a scintillant elfin light.

Shelby had but a moment to take note of his surroundings—the dark hangings woven with silver threads, the embossed shield and spear of an ancient Martian warrior mounted on the wall—before Hekalu entered. The young man saw at once that the noble had lost his air of bored languor which he had noticed about him at the time of their first meeting. His eyes flashed with excitement and his movements were quick and cat-like.

"I see that you have come quickly, Mr. Shelby," said the Martian, "and I am glad. Won't you sit down?"

With scarcely a pause he continued: "I have great wealth, my friend, and while your means do not seem to be small, I believe that it would be very convenient to you to have them supplemented. Suppose I gave you say, ten times as many jewels as are in the tray over on that stand?" Shelby looked in the direction the Martian indicated. He saw a flat shallow container of considerable size. At its center squatted a repulsive thing about eight inches high, carved from a clear crystalline substance from which there flashed countless points of icy, wicked fire—a huge diamond!

Heaped around it were hundreds of magnificent red *tabalti*, most prized of all gems. An expert appraiser had recently told Shelby that in two worlds only thirteen of them were known to exist. And now he was being offered all these stones by one who hinted that he was willing to give him ten times as many—an utterly staggering fortune!

Hekalu's words fairly dumbfounded Shelby, but they grated upon his sense of pride as well. Nevertheless, his face gave no hint of what passed through his mind. An angry reply, he decided, was out of place.

"Naturally, Akar Hekalu, you want something in return for your amazing generosity," he said coolly. "Of course, I could not accept your offer under any other circumstances."

The Martian nodded. "I have it from a reliable source, Mr. Shelby, that you are the inventor of a terrible weapon—an atomic ray which might be dangerous in the hands of unworthy persons. Turn the weapon over to me as well as all information concerning its operation and construction, and promise to say not a word more about the weapon to anyone, and I will give you the jewels at once."

A flash of surprise passed across Shelby's face but he quickly masked it. So this was it! But how was it that the noble had learned of his invention? Could it be that Janice Darell was playing a double hand?—his Jan. He dismissed the idea as preposterous and utterly disloyal.

THE Earthman rose to his feet and addressed the Martian coldly. "If I have such a device I believe that I can place it in better hands than yours."

Hekalu Selba's face gave no hint of anger; in fact he seemed at the point of laughing. "You have done as I expected you would. Your refusal shows me how patriotic you are and gratifies me very much, Mr. Shelby," he said blandly. "You are as a man of Earth should be. However, there is another side to the question. I have certain plans and to have you at large might endanger their fulfillment. Therefore I must ask you to accompany me on a little trip. That weapon of yours will be well taken care of. Now, kindly raise your hands high above your head." The Martian was pointing a bejeweled automatic straight at the chest of his visitor. "You are being covered from two other points in this room so try not to cause any misunderstanding," he added.

Shelby saw the wisdom of obeying the order for he felt quite certain that Hekalu Selba and his minions would not hesitate to shoot him down. What a colossal idiot he had been! He had sensed a trap when the noble had called him over the view-phone and yet he had taken no sensible precautions!

Hekki was searching him now. His long fingers were moving deftly from pocket to pocket. They closed upon his automatic and drew it forth. "Ah," the Martian breathed, "it's as I thought. You have brought a souvenir. A most worthy precaution. And, now that you are no longer in a position to cause any trouble," he

continued sneeringly, "I may as well tell you about my ambition—Oh, it is simple enough; men have thought of it before but none had the nerve or ability to put it over. Briefly it is this—to become Master of both Earth and Mars! My friends are waiting for me out there beyond the Red Planet—waiting for their commander. And there is another little hope—there is a certain beautiful flower of your race—" Here he stopped to allow his captive to imagine the rest.

A hard light came into Austin Shelby's eyes. It was the only outward indication of the sudden tornado of emotions and thoughts that swirled in his mind. This man sought to enforce his will upon the planets! The question of whether he was capable of realizing this tremendous dream or not, the Earthman did not pause to debate.

Fifty years before, Saranov had attempted it, and as a result a score of great cities became shambles. Certainly the present foe of mankind was more powerful than Saranov. The monstrous associate of Hekalu and the flitting specks of light far beyond Mars seemed to bear out the nobleman's boast. And if he somehow got possession of the Atomic Ray! And Jan—What was he going to do to Jan! Certainly it was she to whom he had referred! It was this last idea which hammered on Shelby's brain hardest of all. A little fiend within him seemed to shriek. "Escape! Send your weapon to the War Office! Kill Selba if you can, for everything is at stake!" Escape, yes, but how?

"Place your wrists together behind your back now," Hekalu was saying. "I have a pair of magnificent manacles—careful. Do not make an abrupt movement."

A crazy idea had come into the Earthman's mind. He did not expect his plan to work but it was all he could do. With an air of one resigned to his fate, he obeyed the order. He felt the Martian fumbling with the manacles. He was evidently using only one hand. The other presumably still held the automatic leveled at Shelby's back. But it was useless to think of such things.

A slim finger touched the young engineer's wrist. He caught it, twisted it back at the same time, then, summoning all the quickness and force he could muster, he ducked low and hurled himself backward straight into the Martian. There was a loud report. A hot pain seared into the fleshy folds beneath Austin's left shoulder blade. Those hidden in the darkness at the farther end of the room did not dare to fire for fear of injuring their master. Now Shelby was grappling with Hekalu. He gripped the hand that held the automatic.

Two more reports—ineffective, and then the two fell clawing and in a heap on the floor. The shaded lamp was upset and its illumination globes were broken. There was darkness. Shelby heard the shuffle of running feet coming across the marble pavement of the chamber. Help for Hekalu! He'd have to hurry. But the Martian noble, racially much frailer than the people of Earth, was no match for the athletic Shelby. In a moment he was pinned, unable to move. The Earthman tore his weapon from him and thrust its muzzle against his recent opponent's chest. Before he fired he saw the Martian's bold smile; whatever failings Hekalu Selba had, cowardice was not among them.

On the heels of the gun's report Shelby darted from the room and down the short hallway which led back to the central light-well of the Selba establishment. If he could only somehow reach his plane! He gripped the doorknob and shoved fiercely, but the stout metal panels were immovable. He might have known that the outer door would be locked! Oh, what an unutterable ass he had been!

Now what? A hoarse cry of triumph caused him to turn. Alka was racing toward him with leveled pistol. A spray of projectiles spread toward Shelby but the slave's aim was bad and none of them took effect. A split second later Alka pitched to the floor with a bullet through his brain.

BUT there was another to be reckoned with—one who waddled along rapidly on short powerful legs. Its arms were long and black and more powerfully muscled than a gorilla's. One hand brandished a metal knob-stick, and the other, a long-barreled pistol of Martian design. Silvery armor set with jewels that glittered wickedly in the dim light of the hallway crossed the creature's breast. Its head was bulbous, and its face, set deep in plates of shining black chitin-like armor, consisted only of two enormous eyes and a lipless mouth. No nose at all! The horror Shelby had seen on the liner!

The Earthman fired at the monster. The first bullet clinked harmlessly on his opponent's breast-plate. The second thudded full force upon its skull, but apparently the hard smooth skin of the creature was too tough to allow projectiles hurled from a pistol to penetrate it for it did no real damage—only infuriated the monster. Black hard lids dropped protectingly over its eyes, and its mouth worked convulsively. It quickened its pace and brought its own pistol into play.

Shelby had made a hasty survey of the hall and had noted the stairway beside the door he had tried to open. He darted up this, ducking low behind the stone railing to avoid his weird pursuer's bullets. Perhaps in the chambers above he could find a means of escape. He was leaving a trail of blood on the marble steps, and his wound pained him terribly. He felt sick and weak.

When he had reached the top of the stairs, the unknown horror was already halfway up. It had returned its pistol to its holster. Apparently it had been so maddened by Shelby's shots, that only tearing its quarry to pieces could satisfy its lust for vengeance. And the thing was gaining rapidly!

But the Earthman gritted his teeth and kept doggedly on. He fought back the nauseous giddiness that was creeping upon him. He'd have to escape. Oh God! There was too much at stake—the world and Jan—what was happening to Jan? True, he had killed Selba, but certainly the Martian had minions—men who could carry on without him. He could scarcely have built up all his plans single-handed!

Four flights of steps Shelby and his pursuer ascended. Was there a way of reaching the roof and the plane in this direction? And if there were, could the Earthman reach it before the long arms of the thing so close behind wrapped themselves about him? Such an event, Shelby knew could not mean anything less than failure, and possibly immediate death. The fiend behind did not cry out or order him to halt. In fact it made no vocal sound at all. Not even its breathing, which should have been heavy and labored, was audible. Only the hurried shuffle of its unshod feet. Its silent relentlessness was nerve-wracking.

The engineer saw before him at the top of the stair a small doorway, and beyond it a spiral runway leading upward. The light grillwork gate stood invitingly open. Catching the grill with one hand as he rushed through the door, Shelby sought to slam it shut and latch it. He almost had succeeded, and then a huge hand closed upon the bars. One jerk, and a quick grab with the other immense paw and the strange flight and pursuit would be at an end.

But the jerk was delayed. Shelby fired his last round.

It did the monster little harm, even though the distance between the two was but four feet. Nevertheless it caused the armored horror to leap back a step, and the moment thus provided was sufficient.

As Shelby stumbled up the dark spiral he heard the thing below tearing at the closed grill. He knew that it could not delay the thing for long. He had just reached the trapdoor at the top of the long climb, when a muffled ripping crash echoed up dimly from far beneath him. The gate was down!

Feverishly he struggled with the heavy trap. Normally it would not have been difficult for him to lift the rectangle of aluminum alloy; but wounded as he was, forcing his numbing limbs to obey him required almost superhuman effort. When he had at last succeeded in hoisting it on its hinges, he could again hear the soft padding of hurrying feet.

The engineer found himself in a large room, one wall of which was curved, conforming to the outer contour of the cylindrical tower. Scattered illumination globes gave a dim light to the place. The room was evidently a storehouse for Hekalu's laboratory supplies. Complex mechanisms stood about, evidently waiting to be installed. There were hundreds of metal drums presumably containing chemicals. There were bolts of heavy fabric and stacks of ingots neatly corded. Set in the ceiling of the chamber were several circular windows through the heavy glass of which bright stars shone. Directly above was the roof, and but a few paces distant, the landing stage!

Escape seemed tantalizingly near, but with sinking heart, Shelby noted that there was no easy means of ascent to the roof. He'd have to try to smash one of those windows. But the monster hurrying up the spiral claimed his immediate attention.

Deeply thankful for the peculiar eccentricities of Martian architecture, he hurriedly proceeded to pile ingots on the closed trapdoor. Each of these ingots weighed well over a hundred and fifty pounds. Fortunately for the wounded Earthman, the distance he had to carry them was only a few feet.

CHAPTER IV

Capture!

HE HAD transferred five to their new position before his pursuer arrived beneath the trap and began to push upward mightily upon it. Shelby transferred several more ingots to the pile just to make sure that the monster could not enter. Then, fighting off the diaphanous veil of unconsciousness that was trying to drop over him, he looked about for something with which to effect his escape.

A long bar of metal caught his eye. He seized it, and with all his strength thrust upward at one of the ceiling windows. But the thick glass, crisscrossed by rods of metal, was not easily shattered.

A rattling noise attracted his attention. He glanced back toward the trap. His pile of ingots was trembling as if shaken by a miniature earthquake. The door was rising upward! It settled back and rose again. An inch crack appeared, and through it Shelby could see two eyes and the muzzle of a pistol. He leaped out of range just in time to avoid the bullet that whizzed across the room and flattened itself against the wall.

He darted around toward the hinged side of the trap, where he knew that the black horror could not fire at him, and devoted his attention to another window. He would have reinforced the barricade with more ingots, but he realized that by spending his nearly exhausted strength that way he would be defeating his own purpose.

A dozen times he jabbed up viciously with the bar before a tiny crack appeared in the round pane of glass. The trapdoor behind him was being shaken violently. An ingot on top of the pile was jarred from its place and crashed to the floor. Yes, the window was giving. A small hole appeared in it.

A pair of shiny black forearms had forced their way from under the edge of the trapdoor. Slowly and mightily the shoulders of the monster surged upward. The door was rising, and this time it did not seem that it would sink back.

Shelby had finished his task. Now, with the upper end of the bar thrust through the opening he had made in the window, and the lower end resting in a slight depression in the floor, he proceeded to climb it to safety. His head and shoulders were through the hole when the monster at last burst its way into the room below. But the thing was just an instant too late to hinder him.

Sweating and bloody, Shelby drew himself to the roof and staggered over to the landing stage. Yes, his plane was there.

The night air, and the flush of success was refreshing him. His exaltation leaped higher and higher as his plane swept him up from the summit of the tower of the mysterious Selba.

A wild refrain was drumming in his mind: "Hekalu Selba is dead! I have killed him!" There was nothing more to do but notify the Municipal Air Patrol—an S. O. S. with his siren would accomplish that. They would raid the tower. If any of the Martian's fellow plotters sought to continue with the project the Earthman's new weapon would take care of them.

Shelby was reaching for the siren button, and then a terrific explosion thundered up from somewhere below, and several hundred yards to his right. He saw the orange flash, and then, in an instant the whole city went dark. Another crash came and another. Shelby saw a dark form glide through the air. From far beneath him he heard a troubled murmur mixed with the din of colliding vehicles. Sirens shrieked. In the distance to his right, a great plume of lurid flame blossomed in the sky.

The low purr of a machine gun sounded behind him, and he heard the almost inaudible tick-tick of poisoned needle-darts piercing the fuselage of his craft.

He zoomed sharply upward for a thousand feet, and then glanced back. There was a dim shadow out there —he was being followed. But this discovery, and the realization that the city was attacked made but a vague impression upon his fast-dimming mind. The warm fluid that oozed from his shoulder, making his clothing sodden and sticky, had all but drained his vital energy.

Somehow he began to doubt that he had killed Selba. It had been only a dream, and the monstrous thing that had sought his life had been a dream too. Hekalu was pursuing him now, trying to kill him! The idea took hold, for he could no longer distinguish fancy from reality. It brought to him a vague fear which would have been completely out of place with him had he not been so near gone from loss of blood. It was like a child's fear of the dark.

He began to fly towards home in a wild zigzag course like a dazed bat, but this favored him, for it enabled him to avoid the darts from the pursuing plane. Luckily he remembered that while under fire combat fliers do not make use of their automatic pilots except as a last resort, for these devices cannot direct the complex movements necessary in dodging enemy bullets. Auto-

matically Shelby watched the guiding instruments and followed their directions.

Several times he signaled with his siren, but no one answered him. Thousands of sirens were hooting, and the Air Patrol was very busy. The darkness, the explosions and the muffled roar from the streets continued.

Two ideas now possessed Shelby's mind and he clung to them with the grim persistence of a wounded tiger. One was to get home, secure his weapon and rush it to the federal authorities. The other was to hurry to Janice Darell.

Presently his plane bounded down awkwardly on the landing platform of the building in which his apartment was located. He stumbled out, and down the dark stair. The elevators were not working. Somehow he found his door and unlocked it. He groped toward the wall safe. It was open, and the little black case which contained the unfinished atomic ray projector was gone. A neat round hole had been drilled in the metal door of the safe.

The view-phone bell was ringing. Shelby stumbled to the instrument and moved its switches. The view-plate did not work but he heard a faint voice which he recognized as Jan's. "Is that you, Austin?" it said. "Can't you help me? Something is out there. It has me cornered in my room. It has killed old Rufus. The house police—" There the connection snapped.

A wild surge of anger quickened the engineer's weakly beating heart. He tried to reach the door, and then he felt a stinging sensation in the back of his neck. A needle-dart charged with a sleep-producing drug had struck him. He slumped to the floor.

A moment later a thing of metal and fabric, fitted with drills and delicate thread-like tentacles, and formed like a giant Sadu moth of Mars, darted out from behind a curtain where it had been hiding. It flew up through the air-tube which had been its means of entrance to the room. On the roof it met a black nightmare, and by means of signs traced in the air with an intelligence that was paradoxically human, it directed the monster to Shelby's apartment below.

THE first sensation which bore itself in upon Shelby's consciousness when he was regaining his senses was a terrific throbbing pain in his head. He opened his rheum-plastered eyelids and looked about him. He was lying in a bunk within a small dim-lit compartment. Polished duralumin walls gleamed all about. At the center of his prison was a table, and beyond, built into the opposite wall, was another bunk. There was a black blob of something sprawling on the mattress, but he could not see clearly what it was. The illumination globe in the ceiling was not burning, and only a faint glow filtered through the curtained, circular window. A muffled purring vibration told Shelby that he was aboard a speeding space ship.

Aroused evidently by the stirring of its charge, the thing in the opposite berth arose and strode leisurely toward the Earthian. The metal of its harness tinkled, and sharp points of light flashed against its ebony body, like gems sewn into a sable curtain that is being swayed by a vagrant draft of air.

The Earthman recognized the creature immediately as his recent pursuer. It had pressed the light switch now, and the illumination globe glowed softly. Then the thing bent over Shelby, and with a gentleness that was surprising, it rolled him over and examined his bandaged wound briefly.

The young man conquered his revulsion sufficiently to look up into the monster's face. He thought that it was odd that the sight of it did not terrify him. No, really it was not more hideous than the visages of insects he had seen through a microscope. He studied the hard chitinous visors that blinked over the monster's eyes—the hollow where its nose should have been; and he searched for some hint that there was a human personality within that knotted carcass but found none. The lipless mouth and the blankly staring eyes were without any expression that he could interpret.

Two things struck Shelby as being peculiar—the fact that the monster did not seem to breathe, and the icy coldness of its hands.

The thing walked to the door, unlocked it, and left the room. The engineer heard a grating of the key being turned when the door had been shut.

Taking advantage of the opportunity to move about without being observed, he jumped out of bed and hurried to the window. It was then that he noticed that there was a metal band about his right ankle. A long light chain led from it to an eyelet in the wall. Truly he was a prisoner!

A single glance through the porthole confirmed what he had known was true—the black sky and the unwinking stars of space.

There was a narrow walk beneath the window, running the full length of the flier's hull. The railing of woven wire cast a checkered shadow on the walk. Somewhere toward the stern a blazing sun was shining, but Shelby could not see it.

His first thoughts concerned some means of spoiling the plans of Selba's band. He guessed, of course, that they were responsible for his present position, and he realized that it was likely that the zero hour of their attack upon the planets was not far off. Could he escape?—a practical impossibility.

Nevertheless he looked longingly at the emergency space-boat hugging close to the hull of its mother ship, and fitted so admirably into her streamlining. If he could get to the entrance of that boat—it was in some other room farther toward the bow—he could give his captors a run for their money and perhaps reach Earth. And if he did? Shelby had great confidence in the Atomic Ray. He removed the top from the button where he had secreted the pink crystal. It was still there.

But how could he get into the space-boat? Plainly it could not be accomplished now. Perhaps soon—in a few hours maybe, an opportunity would present itself. And there were other things he might do. A moment in the engine room, and he could blow the ship to atoms, and with it, most of the ringleaders of the Selba crowd. Stoically Shelby realized that he too would be destroyed, but if he could serve his world, he would not hesitate to make the move.

Bent on getting as well acquainted with his present environment as he could, the Earthman proceeded to examine minutely everything that was within the range of his senses. He tested the strength of his chain, and began to fumble over each link, without having any definite idea of what value the knowledge gleaned from such a procedure would be to him.

He had reached about the tenth link when he heard a sound above the purr of rocket motors—voices. There were two of them. One was a man's; the other was soft and feminine. Shelby knew it at once—Janice Darell's! So she too was aboard the space flier! He realized it with a pang of apprehension. In vain the Earthman tried to catch the words they were saying, but beyond detecting the chilly tone in the girl's voice, he could get no idea of what they were talking about. Apparently they were in the room next to his.

He heard footsteps in the hall outside, and returned quickly to his bunk. Three people entered the room. The first was the black monster. Shelby gave a gasp when he saw who followed it—Jan. She looked tired and worn but in her face there was no hint of fear. She smiled wanly at Shelby. There was another behind her. It was Hekalu Selba—the man the Earthian thought he had killed! For once Shelby was really dumbfounded. He uttered the Martian's name without thinking.

The noble grinned in satanic amusement. "It is I, none other, my friend," he said. "Aren't you glad to see me? You look as though you were being visited by a ghost."

The Martian chuckled. "But thanks to a breast armor I still belong to this plane of existence. I admit though that you gave me a great scare when you nearly, but not quite, escaped. My four bombing fliers supplied an adequate diversion for the Municipal Patrol, didn't they? And my Sadu moth, radio controlled automaton—it functioned perfectly!"

SHELBY rose from the bunk and sauntered toward his captor. Hekalu made no move to stop him. "Now that you have Miss Darell and me nicely trapped, what do you intend to do?" Shelby inquired coldly.

The Martian laughed. "You have a very inquisitive nature, Mr. Shelby," he said. "What do you expect me to do? Continue with my plans which you so almost successfully spoiled, my friend." Here Hekki's voice became suddenly excited and husky; his lips curled and his eyes took on the fanatical look of a megalomaniac who sees within his grasp his dream of power.

"Very soon," he lisped, "we strike. Mars first, then your planet. I shall be great—greater than all the combined rulers of the millenniums gone by, and Janice here, will share my greatness." The slender arm of Selba stole around the waist of the girl beside him. She did not try to draw away. "That last little idea maddens you, doesn't it, Mr. Shelby?" he added with a sneer.

Shelby felt a flush of heat in his cheeks. What happened to Jan that she should permit the noble to be so familiar with her? Had she been dazzled by his wealth and his promises of what stupendous things the future would bring? For a fraction of a second something seemed to let go in the Earthman's mind, and then he saw the fleeting look in the girl's eyes. He checked the impulse that had urged him to send a fist crashing into the face of the smirking noble. Certainly such an act of violence could accomplish no good.

Shelby looked at the black monster. It was standing beside the table, and leaned forward, so that its knuckles rested ape-like upon the floor. It was gazing narrowly at the Martian, and its mouth opened and closed nervously. There was a faint something in its almost blank face which suggested to the Earthman that the bond of friendship between the Prince of Selba and this weird devil of the void was none too strong.

Hekalu withdrew his arm from about the girl. He nodded toward the bejeweled nightmare. "I had almost forgotten my lieutenant here, Mr. Shelby," he said. "He is the ruler of the empire from which I am recruiting my forces—my chief ally. Since his people do not employ a language of sounds, he has no vocal name; but for the sake of convenience I have christened him Alkebar, which means 'The Unknown.' He was my companion on my recent trip to Earth, for he wanted very much to see what a beautiful place is your world." There was a sinister hint in these last words.

Hekki made a few quick signs to Alkebar with his fingers, and then turned to the girl. "I must ask you two to leave us now, Jan," he said. "Mr. Shelby and I have an important matter to discuss."

Alkebar grasped Janice's arm with a horny paw, and hurried her through the door. But nevertheless Shelby caught a fleeting glimpse of her face as her lips formed, but did not utter, the word—"Wait." Hekki did not see.

The Earthman turned upon the Martian. "I am going to usurp your assumed right to start this little private conversation, Akar Hekalu," he told him. "There is only one thing I have to say. You are a noble, the son of a long line of nobles who righted wrongs and avenged insults on the field of honor. You have wronged me, no you have outraged me. Therefore I challenge you to combat. Choose your weapons. No place will suit me better than this room; no time better than now." But if Austin had expected to nettle Hekalu into a mood for fighting, he was disappointed.

The Martian was smiling mockingly. "Life is sweet," he said, "sweeter to me than it has ever been before. I do not wish to die—not even by your hands. And you—you have certain knowledge and information which is valuable to me. You must live. I was going to talk to you about what you know. That weapon of yours—we are working on a projector. But something is evidently missing—a tiny element."

"What you have learned about the Atomic Ray," Shelby cut in, "you learned through your own efforts. If you can steal the remainder of the necessary information from my brain, you are welcome. Otherwise, I urgently invite you to go to the devil."

Hekki's face assumed a look of infinite though make-believe sadness. It was a trick such as a designing woman might use to attract some desirable male.

"I am sorry to hear you talk so, Mr. Shelby," he said. "But as you suggest, I believe that there are ways of stealing knowledge even from your mind. For instance, in an old vault beneath my palace at Taboor, I once found a sealed vat containing a certain fluid. The Ancient Ones were wise, for when they desired any man to talk, they thrust his arms or his legs, or perchance his whole body into the fluid. Very slowly, and with some discomfort, it ate away the tissue of his nerves. I must leave you now, my friend. Think well, and may the gods that rule the universe guide you on the right course."

He opened the door. Shelby caught a glimpse of a long hall, and at the far end, the bewildering maze of control-room equipment. The panel closed.

CHAPTER V

The Race Through Space

IMMEDIATELY the Earthman set himself to the task of examining everything in his prison. But as he had expected, there was little or nothing to discover. The walls which his tether permitted him to reach were all perfectly smooth and solid. He realized with a sheepish grin that it had been foolish of him to even dare to hope that they would be otherwise. The chain fastened to the fetter was quite adequate to hold him. The window, even if it might have been used as an avenue of escape, was securely fastened with bolts, so that it would have taken a man equipped with a heavy set of wrenches, an hour to remove it. To shatter the flexible pane was next to an impossibility. The table was firmly welded to the floor. Beyond the table, Shelby could not go, for the chain prevented him. But he was quite sure that there was nothing movable in

the entire room massive enough to be used as a tool or weapon.

He slumped down on his bunk, and let one hand rest on a small power-pipe which ran along the wall and up to the illumination globe above. For a minute dejection almost got a firm grip on him. But he fought it off. This was no time to give up. Why, the struggle hadn't even started yet!

Shelby felt a faint vibration of the power-pipe under his hand. For a considerable time the impressions had been coming to him, but they had scarcely penetrated into his consciousness. They seemed no more significant than the hundred and one little noises and disturbances that go with the running of any space ship. Presently however, the regular sequence of the pulsations attracted his attention. Something made him think of the almost obsolete Morse code. Then the realization came to him. Someone in another room on he ship was tapping on the power-pipe—signaling—signaling him! He spelled the word out—A-u-s-t-i-n, repeated over and over again.

His first thought was of Jan. It must be she who was calling him for there was no one else.

Quickly, with his heavy signet ring, he tapped out an answer: "It is I, Jan, A. S. shoot—"

With tensed muscles, and with fingers firmly clutching the power-pipe that he might not miss a single signal, Shelby crouched, receiving the message. Somehow there was an urgency, an insistence, an appeal about those hurried pulsations that no human voice could have conveyed. It was fantastically like communicating with one who is buried alive.

"We must escape not later than five hours from now," the tapping spelled. "You have been unconscious for a long time—drugged. In five hours we land on Mars. Then escape will be impossible.

"Hekki has told me much, and I have seen much. The horrors that are Selba's henchmen—three times some of them came to the ship, once in a band of over a hundred. Hekki is worried. He has not troubled me yet. Too busy I suppose. I have tried to make believe that I agree to his plans. I thought I could control him that way. But he has been taking the Elar drug.

"We must escape, Austin. We must! Can't you think of a way? I will help! If they get you to the concentration base in the Taraal they will torture you. And we must remember our homeland!"

The hurrying vibrations ceased, and then, almost before he knew what he was doing, Shelby was tapping out an answer promising the impossible.

"Never fear, dearest," he signaled. "Just let me think for a few minutes." A moment later this phrase almost made him laugh. The sap hero of a comedy which had recently been broadcast over the radio-view had said almost these exact words. Think? Of what? Escape within five hours? How? But Jan's appeal sent in such an odd way had an almost magical effect on him, and made his brain work harder almost than ever before. And then the ghost of an idea came. There was a chance that it would work. He signaled to Jan, and then for half an hour, they put their heads together—planning.

Somewhat nervous, Shelby walked to the door and hammered loudly upon it. A thin-faced slave whose hide was burned by desert suns to the color of mahogany, appeared almost immediately.

Shelby answered his inquiring look briefly: "I would speak to your master," he said in Pagari—"right away." The slave nodded and reclosed the door.

In excited impatience the Earthman waited. Now and then he tapped short messages of encouragement to Jan. Would Hekalu never come? The strain of suspense was not exactly pleasant. Finally, unable to contain himself any longer, he rose from the bunk where he had been reclining in readiness for the first move of the coup he was planning, and began to pace the floor.

He chanced to glance out of the window. On the railed walk beyond, a man clad in space armor was bending over a small portable case which was supported on a tripod. Shelby surmised correctly that this man was Hekalu Selba.

Beside him, paying close attention to whatever the Martian was doing, stood the black Alkebar. The Earthman frowned in puzzlement, almost in awe. For Hekki's weird companion wore nothing that would be of the least help in protecting him from interplanetary cold and lack of air pressure. Not even an oxygen helmet! And yet, as the monster examined interestedly, every dial and switch that Hekalu touched, he showed not the slightest hint of discomfort. The airless emptiness of space seemed home to him. How could such things be? A strange thrill tingled and vibrated along Shelby's spine when he realized how alien was Alkebar. There was no kinship between him and the creatures of either Earth or Mars.

Presently Hekki looked up, and as though moved by some intuitive realization that he was being watched, turned awkwardly in his cumbersome attire, and glanced along the row of portholes in the side of the vessel. He saw the Earthman and smiled at him. Shelby felt that it was the kind of smile which a tolerant father might show to his youngest son. Hekalu waved his hand, and his lips, behind the glazed front of the helmet, formed several words which Shelby could not interpret. Then the Martian returned his attention to his apparatus.

WHEN Selba entered his prisoner's room some moments later, he found him lounging on the bunk.

The Martian looked enquiringly at Shelby. "You have reached some conclusion, my friend?" he asked.

Without changing his position on the bunk the young man nodded. There was an expression of dejection and sullen resignation on his face which he was trying hard, above the intense excitement which possessed him, to make realistic. Still acting the part he spoke: "Yes, Akar Hekalu," he said between teeth that were apparently gritted with rage, "I have decided to reveal to you the secret of the Atomic Ray."

A triumphant gleam came into the Martian's eyes. "Ah, my friend," he said, "you at last see the light. I knew that you would. But what has been the cause for this sudden change in attitude? The torture chamber, perhaps?" There was an undercurrent of suspicion in Hekalu's voice.

Shelby turned his head sullenly away, feigning shame. He said nothing. A minute passed during which time Hekalu stared at his captive, a sardonic smirk of contempt curling his thin coral lips.

Finally he said, "I will have Koo Faya bring you writing materials, and you will describe in writing every detail of the manufacture of the missing element."

"No," replied Shelby, turning his face toward the Martian, "I haven't the ability to do that. It will be necessary for you to take me to the laboratory of the ship where I can demonstrate the process to you. It is much too delicate and complicated."

The noble's eyes wavered slightly. "Once," he said,

"you tried to trick me, but I warn you that I am on guard now so do not attempt it again."

He signed to Alkebar who had been standing silently beside the open door. The giant drew a key from a pouch at his side, and kneeling, unlocked the fetter fastened about Shelby's ankle. It rattled to the floor. And at the same time the Earthian, leaning back on the bunk with arms stretching over his head, tapped sharply three times with his signet ring on the power-pipe. It seemed to be only an unconscious gesture—nervousness perhaps.

Immediately there was a terrific crash from down the passage way, followed by an agonized scream. Another crash. More screams.

Hekalu started, and then making a hurried gesture to Alkebar which indicated that he was to guard the inventor of the Atomic Ray, he drew his automatic and dashed down the corridor to investigate the disturbance. The Earthman however, was in no mood to be guarded. No longer shackled, he leaped to his feet and over to the center of the room. The great voiceless beast from the stars stood before the doorway with his long arms outstretched. He was not trying to capture the Earthman—only seeking to block his path.

But Shelby had no time to waste. Gathering himself together, he hurtled straight for the ankles of his opponent. The fact that the artificial gravity of the ship was of the same strength as that of Mars—only a trifle more than one-third that of Earth—added to the effectiveness of his plunge. The mighty-muscled Alkebar, puzzled by the unheard-of tactics of his agile though vastly weaker foe, suddenly found himself in a sprawling heap on the floor. Shelby leaped over him through the door, slammed it, and raced precipitately down the corridor.

In the meantime Hekalu Selba had reached Janice Darell's room, but when he had unlocked it and had thrust his head inside to see what the matter was, a heavy urn, deftly aimed, had crashed full into his face. Shelby saw him sprawling in the passage badly dazed, and a split second later Jan dashed from her cabin. She looked around, and when she saw Shelby coming swiftly toward her she flashed him a quick smile of triumph.

But Alkebar had wrenched the portal of the Earthman's recent prison open, and was in hot pursuit. He was tugging frantically at the pistol in his belt.

"Run, Jan, quick!—To the control room!" Austin shouted.

He caught up Hekki's automatic which had dropped from the Martian's grasp when he had fallen, and wheeling, fired at the black colossus. The bullet struck Alkebar's right hand with which he was raising his pistol. The tough natural armor which covered the monster from head to foot prevented it from doing any serious damage, but it must have stung badly, for his weapon clattered to the floor. While he was stooping to recover it, Shelby hurried forward to catch up with Jan. It was but a few yards to the control room. If they could get there, overcome whoever was in charge and barricade themselves in, they could master the ship!

Their luck had been good, but it was not destined to be as good as that. They caught but a brief glimpse of the bewildering array of switches, dials and levers, that constituted the brain-center of the craft. Standing on guard before his instrument panels was the mahogany-colored slave Koo Faya. He was half crouching, at bay. There was a murderous light in his eyes, and he held leveled in his hands a light machine gun. Shelby's automatic was leveled too, and he pressed his trigger an instant before the Martian. Four bullets whizzed into the control room, splattering close about the thin mummy-like body of Koo Faya. A glass globe that glowed redly on the top of a complicated mechanism, was struck and burst with a popping sound. A rose-colored vapor floated ceiling-ward.

SIMULTANEOUSLY Koo Faya's weapon began to whir. Then, even as Shelby jerked Jan back out of danger, the wild shriek of an alarm siren mingled with the discordant clashing jangle of ungoverned machinery running amuck, rang through the ship, and the huge metal cigar pitched and careened like a frightened thing.

Alkebar, having recovered his pistol, was staggering down the passage shooting rapidly. But owing to the crazy motion of the space flier his missiles were momentarily not taking effect.

Austin and Jan knew that Koo Faya was leaping to a position where he could shoot his poisoned darts at them again. What now? Cornered? No! Janice Darell wrenched open a door in the side of the passage and shoved Shelby into the tiny room beyond.

In the opposite wall of the closet was a round dark opening. "The emergency flier," Jan shouted. "Into it!"

As quickly as they could they climbed through into the submarine-like interior beyond. Fighting to keep themselves erect, they slammed the heavy duralumin portal to and fastened it. Alkebar was already groping on the opposite side. But he was too late.

Shelby leaped to the control panel and cut the electric current from the magnets that held the emergency flier anchored to its mother ship. It floated, free from the careening hulk. Its rocket motors roared into life.

The occupants of the tiny craft looked back at the *Selba*. It had ceased its mad motions now, and was hanging quietly in space. Evidently Koo Faya had succeeded in righting matters to some slight extent at least. Would he be able to patch things up entirely? The red globe could be replaced in half an hour. It would be that length of time at least before the *Selba* could engage in pursuit.

But the arm of a space ship, equipped with weapons commonly used in the void, is long. Hence Austin Shelby considered it his first duty to put as much distance between his craft and Hekalu's ship as possible.

Still four million miles away, Mars glowed—a tiny red disc; and he headed toward her giving the flier full freedom to do its best. The fiery vapors fairly tore from the rocket nozzles.

With one hand in readiness on the control lever, which resembled in appearance and operation the joystick of an airplane, and his feet on the bar used for steering in a lateral plane, he kept his eyes fixed on the receding bulk behind. Jan had handed him one of the two pairs of binoculars which she had just found in the supply compartment.

Austin knew what to expect from the direction of the *Selba*, and it came well within schedule. A flash of green fire spurted from the foredeck of the ship. It showed up with startling vividness against the jeweled sable of the void.

Abruptly Shelby drew the control lever back. In response to his movement the rocket nozzles, now deflected from alignment with the central axis of the craft, sent it into a steep climb. The terrific angular acceleration seemed in bent on forcing the two fugitives straight through the metal floor. It drew the

blood from their faces and made them grow pale and giddy. But they escaped being struck by the torpedo.

It exploded a hundred yards beneath the flier's keel. Fragments of it banged against the hull. In rapid succession other flashes darted from the *Selba*, which had dwindled to a silvery speck far to the rear. But still those missiles, directed by incredibly delicate sighting mechanisms, and hurled at almost the speed of light, continued to score remarkably close to their target.

If it had not been such an elusive target they most certainly would have blasted it to fragments. But Shelby, skilled as were most of the men of his time, in the handling of small space craft, was able to endow his flier with much of the agility of an alarmed dragon fly. Darting, weaving, zigzagging, yet always keeping its general course fixed toward Mars, it careened away. Always it was ringed by an aura of green flashes.

However, good fortune is seldom perfect. The tempered duralumin plates of the flier managed to withstand the force of all of the torpedo fragments which showered them—with one exception. One dart from Hekalu's ship exploded barely fifty feet to the right of the fugitive craft, and a flying chunk of steel sent it pitching and tumbling through the ether.

When the two bruised occupants had regained their equilibrium they heard a faint hissing above the roar of rockets. They knew that there was but slight chance that the *Selba* could do them any further harm, for though the torpedoes continued to come, the distance between the two vessels was now so great that a damaging shot was almost an impossibility. Nevertheless, the present situation was serious enough. A leak!

Fixing the nose of the flier toward the Red Planet, and locking the controls, Shelby left the pilot's seat to determine the extent of the damage, while Jan searched the supply compartment for something with which to repair it. There was a deep dent in one of the ceiling plates and a thin wriggly crack through the center of it—not an easy job to patch that out in space under the best of circumstances.

The young man whistled when he saw how near they had come to a hideous death. Several times he had seen the bodies of men who had been suddenly exposed to the pressureless airless cold of the outer void—hideous bloated things through whose skin the livid blood had forced its way.

"Any luck, Jan," he asked, looking back at his companion. "Did you find some cement?"

She shook her head.

CHAPTER VI

The Space Men Attack

FIRST stepping to the oxygen supply valve and opening it a trifle wider, Shelby hastened to assist the girl in her quest. Their ears were ringing. The air pressure within the hull was dropping rapidly. Diligently they ransacked every nook and corner, but found nothing more valuable than a can of thick grease. Shelby smeared some of it over the crevice; it helped but did not by any means check the flow of the escaping air entirely.

"It's a race with time now, Jan," he said quietly.

She looked at him. Her face was a trifle pale, but her lips and eyes were smiling. "Are we on our way to Mars, Captain?" she enquired.

He nodded. "We are, Admiral. The fuel tanks are full and if our air lasts we'll get there."

"And when we do," she put in, "the best of luck to Hekki and his friends!"

A vision swept through Shelby's mind—batteries of fantastic machines whose maws spewed flames of faint lavender fire—blinding flashes of light and world-rocking explosions: a hideous thing to dream of—hideous yet glorious, for the civilizations and freedom of two worlds depended upon it. To the Red Planet—they *must* make it!

Janice Darell had placed her hand lightly on Shelby's arm. Her expression was serious, almost hard. "Austin," she said, "tell me truthfully, can we really reach Mars? It is likely that we shall get there before we go out?"

"Certainly, darling," he replied, putting as much assurance into the words and expression as was possible. "Why do you ask?"

There was something that suggested doubt, perhaps even displeasure in her answer: "We have a duty to perform, Austin—a duty infinitely bigger than our own petty existences. You have not seen what I have seen—small scouting patrols that came to the *Selba* riding strange round things that must have been machines of some kind. One look at those henchmen of Alkebar, their great black bodies, their quick nervous movements—like eager panthers, their wicked-looking weapons which they carried with such an air of easy assurance, and you would have known what they hoped to do. Most of these devils are within the orbit of Mars for the first time. Certainly Hekki has told you something about them?"

Shelby nodded. "Very little; but I have noticed a few of Alkebar's remarkable peculiarities," he said.

"Well," she continued, "if we can't get to Taboor, there is one thing we can do—destroy the *Selba*, and with it Hekki and Alkebar."

"Destroy the *Selba!*" Shelby exploded, "with what? Those toy machine guns on the nose of this bus? The bullets wouldn't even make noticeable scratches in the hide of that tough old girl."

"Not with the machine guns," Jan said slowly, "with this flier! A little luck and it would work."

The idea flashed through Shelby's brain. Ram the *Selba* at high speed! Absolutely certain self-murder! A wave of tremendous admiration for the girl came over him. She had something more in her favor than mere beauty and intelligence.

"Your idea is a pretty good one, Jan," he told her. "But rest assured that unless you can overpower me, it will never be put into execution. However, I'll tell you the truth: we have about a fifty-fifty chance of reaching the Red Planet alive."

And so they tore on their way across the void while they watched the dial on the oxygen tank. They were racing with a tiny needle that crept ever nearer to the zero point that was its goal.

By allowing the pressure within the flier to drop to the lowest point that they could endure, they managed to conserve considerable oxygen, for then the rate of escape from the crevice the torpedo fragment had made was naturally not so rapid.

Frequently they examined the sky behind them, expecting momentarily to discover the tiny speck of flitting silver that would be the *Selba*. But if the ship was pursuing them it had not yet come close enough to be seen.

However, there was another, and perhaps greater menace which kept their eyes turning this way and that, searching for signs of danger. Clusters of dully-glowing specks in any quarter of the heavens would be the first indications of its presence. They would

grow larger, come hurtling on like racing meteors in the sun's glow. Only there would be an odd wobbly motion about their darting flight. Shelby tested the trips of the two machine guns. Spurts of green flame plumed out of the muzzles.

He had set the radio transmitter in operation, and was sending occasional signals for assistance. But he knew that this was practically a useless move. Hekalu had taken them far off the beaten track, and they were still half a million miles from the Terrestro-Martian traffic lane. The range of the transmitter of this craft was only ten thousand miles. Even if they had been much nearer the chances of their signals being picked up were slight.

The Martian disc was growing larger. It had become an ochre sphere delicately ringed and mottled with greens and browns like a cloudy opal. The flier was fairly eating up the distance.

Shelby had just said: "I believe we're going to make it, Jan," and then the signs which they had hoped would not appear came. Ahead of them and a little to their right, a vague cluster of specks glimmered into view. It wavered like a wisp of luminous smoke buffeted by a light breeze. This was the one thing that distinguished it from a meteor cluster.

RAPIDLY the individual points of light grew, becoming tiny stars that glowed by the reflected light of the sun. Within five minutes there was no longer any chance of mistaking their identity, for their flat disc-like shapes and the half-human forms of the things that rode them were already visible through the binoculars. They were approaching at terrific velocity. Both Jan and Austin knew them to be subjects of Alkebar. There was no mistaking their motive. Doubtless orders had been flashed to them from the disabled *Selba*.

Realizing that these fleet space riders could easily catch up with his flier if they so chose, Shelby made no attempt to elude them. Instead he clung doggedly to the straight course toward Mars.

The twin machine guns, responding obediently to their directing mechanism, swung on their swivel toward the hurtling foes. Shelby peered into the eyepiece of the "sighter," a complicated arrangement of mirrors and lenses which enabled the pilot to always look directly through the ring-sights regardless of what direction the gun barrels were pointing. He pressed the trips, and soundlessly, out in the vacuum of space, the guns went into action. Flickering green flames of detonating radio-active explosive darted from their muzzles.

Almost immediately there were answering flashes among the approaching shapes, for the high-calibre bullets were also loaded with explosive. One projectile took effect—another! Emerald flares of light, and nothing remained of two bold space men and their queer disc-like vehicles but torn fragments of flesh and metal.

The Space Men were very close now. Jan and Shelby could see the light flashing on their jeweled harnesses and on the weapons which they flourished defiantly. There must have been almost five hundred in the party. Somehow their wild charge was vaguely reminiscent of a band of fierce Bedouin marauders, racing madly across the desert, bent on pillage. Only it was the Arabs who suffered by this comparison, for the desert of these mysterious Space Men was the whole of interstellar emptiness; and their forms and those of the things they rode, were the forms of the forces of Iblees himself.

Apparently these henchmen of Alkebar had some object in view other than the mere destruction of the flier, for they made no move to use their weapons. They were pulling upon levers on their vehicles, checking their headlong flight.

Now they were coursing with the little craft, swarming about it, edging nearer, at the same time taking care to keep out of range of Shelby's guns.

There was a scraping against the hull and a light jolt as a talon secured a hold on an eyelet ring. A black bulk dropped down on the nose of the craft. A pair of hands gripped the barrels of the machine guns, and with an easy tug, tore them from their mountings. There were shifting scratching sounds coming through the flier's light shell—heavy bodies moving about, and then a sudden ripping vibration. The control lever felt loose in Shelby's hand. He could no longer guide the vessel. And there was nothing either he or Jan could do except wait. The rocket motors still purred evenly.

"I guess they've got us this time, Jan," the young man said to his companion. "I wonder what they are going to do with us?" He spoke as casually as though this latest unfavorable turn of fortune was no more serious than the loss of a game of chess.

Janice Darell was equally cool. "Next time we win," she laughed. It is odd how human beings so often react to strange and terrifying situations. "I'm always ready, you see. Here I was crouching behind you throughout the fight with this perfectly useless pistol in my hand, hoping foolishly that I might be able to use it. That's loyalty."

They fell to studying the two monsters which rested on the nose of the craft in front of the pilot's observation window, where the guns had been. The Space Man was crouching out there trying to peer in at them. He was very much like Alkebar—only not so large, and his equipment and adornment did not boast so many jewels.

Shelby felt a peculiar sense of the unreality of the creature. He looked into its face and saw its eyes. Beside the left orb was a mottled area that must have been a scar. It seemed as concrete as anything he had ever seen, and yet for the second time, he told himself that such a creature wasn't possible!

Time honored tradition had said: "Life can exist only where there is oxygen, water and warmth." And all three of the requisites were lacking in the void. Shelby realized that tradition might be wrong, but the question still remained: How did these creatures of space live? Whence came the energy that kept their bodies functioning? If not from the combustion of food with oxygen, then where? If there were no moisture in their bodies, and there certainly couldn't be, for it would have been frozen in an instant and diffused through sublimation, how could vital fluids flow through their veins? He put these questions to Jan, but she shook her head.

"Hekki informed me that these people inhabited a region somewhere beyond Mars, but he did not tell how it was that they could live in space," she said. "It might be that they have had a development similar to terrestrial insects with the skeleton of armor enclosing their flesh."

The vehicles of the Space Men were even greater puzzles. How did they fly out here where the rocket was the only human invention that could move? Many of the vehicles were visible now through the flier's windows. They were disc shaped platforms of a strange lusterless metal. In the center of the top was an opening in which the Space Men sat. Projecting

from the discs were a series of levers, permitting evidently simple control. But no hint of their principle of operation was given. They emitted no rocket jets; no beams projected from them.

Austin realized that there were many mysteries of the universe with which he was not acquainted; this was certainly one.

THE sound of bodies moving about on the outer shell of the flier was still audible. Presently there was a sharp explosion somewhere toward the stern. The rockets immediately fell silent. The fugitives saw that some of the Space Men were now busying themselves with long metal cables. Deftly and expertly they were looping them through the eyelet rings set at frequent intervals along the sides of the flier.

The other ends of the cables they fastened firmly to similar rings on their vehicles. They finished the job with all the efficiency of trained military engineers. Then, with the small interplanetary vessel in tow, the Space Men began to move off toward Mars, rapidly gaining momentum until their speed must have considerably exceeded that which most space craft could equal. They deflected their course somewhat from the direct path to the Red Planet, probably to avoid a meeting with any wandering ship.

Throughout the fantastic voyage Shelby and Janice Darell found little to do but stare dumbfounded at their weird captors and to watch the rapidly dropping needle of their oxygen supply-gauge. But as it proved, there was little danger of suffocation, for the Space Men were making good time.

And so, after two hours of flying they came to Mars —not to Taboor which the fugitives had previously hoped to reach, but to a deep valley in the desert of the Taraal. The strange caravan circled around to the night side of the planet, and then, slowly and carefully, but with a hint that they understood their work well, they proceeded to lower the disabled craft through the atmosphere to the ground below.

The door of the flier was torn open like a paper thing, and a black giant fully as huge and burly as Alkebar himself hustled the adventurers roughly out into the open.

The pock-marked face of Loo, the Martian name for their nearer moon, was in the sky, and by its light they could see hundreds of Space Men crowding about them. Plainly this Martian colony was fairly well peopled, for there were many more than the five hundred who captured them. The attitude of the onlookers was one of casual curiosity. For the moment at least they were not showing the more brutal side of their characters.

The fugitives were given but a moment to look about, while their jailer apparently carried on a silent conversation with one of his lieutenants.

They saw the sandy floor of the huge rectangular enclosure dotted with strange mounds which must have been some kind of shelter, the encircling walls crowned by square towers at regular intervals. Those walls were amber-colored in the moonlight, and cast dense shadows that shifted visibly as Loo raced in its meteoric course toward the east. Here and there before the mounds huge vague shapes squatted. At the center of the enclosure a tall spire of silvery girders rose, supporting at its summit a cone of a dull black substance. It looked like the creation of either Earthmen or Martians.

Beyond the wall the rounded summits of desert hills, over which in ages past, a restless ocean had poured and flowed, were visible. In spite of their position the two young Earthians could not help but marvel at the silent grandeur of this exotic scenery. A light though chilly desert wind blew refreshingly against their faces.

The black giant had kept a hand on each of his prisoners during his brief conference, and now, none too gently, he guided them to the entrance of one of the mound dwellings. The Space Man ushered his charges into a corridor, and then, fumbling with a curious lock he opened a heavy door and shoved them into the dim-lit room beyond. With a rattling clink the great stone panel closed behind them.

A lump of self-luminous rock set in the stone ceiling gave a faint illumination to the bare interior. There was no furniture—only the sand-covered floor and rough rocky walls. On the floor a Space Man, larger and more magnificently-muscled by far than any they had yet seen, sprawled. He was either unconscious or dead; they could not tell which. There were hideous welts and gashes and half-healed scars all over his body. The gashes were caked with a viscid purplish substance.

With the coming of the sudden Martian dawn which flashed through a narrow embrasure high in the wall, the jailer returned. His first act was to thrust the needle of what appeared to be a form of hypodermic syringe into the arm of the unconscious Space Man. Then he led his Earthian captives out into the open.

Neither Jan nor Austin were surprised when they saw the *Selba* squatting near the base of the spire. Several Space Men, directed by the slave Koo Faya, moved about the ship, working the fueling pump.

Walking down the gangplank which led up to the entrance of the vessel was Alkebar, and beside him, Hekalu himself. The latter sauntered leisurely toward his captives, and the Chieftain moved off toward a group of Space Men standing some distance away.

CHAPTER VII

Ankova's Story

THE Martian made a brief nervous sign to the jailer. "Gently, Rega," he said. The Space Man relaxed his painful grip on his prisoners. The noble surveyed them smiling. Defiantly, half contemptuously, Shelby was smiling back.

Finally, with a mocking casual air, Hekki spoke: "There is a very ancient saying on your planet," he said, "to the effect that bad pennies always return." The corners of his mouth twitched with sardonic amusement. His manner grew more serious, yet still there was an undercurrent of sarcasm: "Miss Darell and Mr. Shelby, I want to compliment you on your remarkable cleverness and daring. Words cannot express my admiration for you. You have every right to be proud of yourselves."

Shelby nodded. "We are," he told him drily. "Is there anything more on your mind?" He turned away with an expression of bored contemptuous indifference.

"I have little to say except that we are about to continue our recently interrupted journey tonight, Mr. Shelby," said the Martian.

He saw the Earthman and the girl casting interested glances at the disc vehicles that surrounded them everywhere.

"You like my people?" Hekki inquired. "You find them entertaining? Perhaps you have discovered things in their habits which you cannot understand. Shall I give you explanations?" For the moment at least there was a serious earnest ring in Hekalu's voice.

"Flag of truce, Jan. This should be interesting," Shelby said. His eyes were full of eagerness as he turned back toward the Martian. "How do they live out there?" he cried. "There isn't any air or water, and it's almost as cold as it can get anywhere. Why, the

thing is utterly impossible according to the laws of common sense!"

Immediately all of Hekalu's lazy air of careless mockery was gone, and the dynamic aura of the tireless experimenter and inventor that had hidden beneath it showed out clear. His voice was husky with suppressed excitement when he spoke:

"I too was dumbfounded when, some five Earth years ago, I first ran across the Space Men out there. (He waved his hand toward the west away from the sun.) But after I had studied them for a time, I knew that there was really nothing very remarkable or impossible about the nature of their living. It is actually quite similar to our own.

"Why do we need air? Simply because by the chemical combination of oxygen with food we obtain the energy necessary to make our brains to think, our limbs to move, and our hearts to beat. Energy is life. But doesn't it occur to you that this vital thing might be obtained in some other manner? The Space Men do. Their principal food is the radio-active element, atomic number 109, as yet undiscovered on the planets. It is a purplish liquid that is fairly abundant on a number of the planetoids. Daily, like radium, it gives off vast quantities of energy; and when in the systems of the Space Men it supplies them with power more efficiently than food and oxygen ever could do for us.

"Why can't we survive the intense cold of space? The answer is a simple one. The protoplasm of all forms of living things that we know of, including the Space Men themselves, is a colloidal jelly the principal portion of which is, and must be, a liquid. Cells must be bathed and nourished, and impurities washed away. Without liquids there seems to be no likelihood that there would be any life, unless in some manner a gas could perform this fluid function. Solids would remain forever dead and motionless.

"If anything happens to chill even slightly the protoplasm of any of the higher forms of planetary life, the body fluid becomes sluggish and death may result. No mammals or birds that we know of can live actively with their body temperatures at all approaching the freezing point of water. However, in the polar seas of both planets there are creatures whose systems function quite normally with their blood temperatures just above this point. But beyond this deadline, zero degrees Centigrade, or a little lower or higher, depending on the actual congealing point of the water in their bodies, even they cannot go, for there, the cold limit of Terrestro-Martian life has been reached.

"Why couldn't these polar fish survive the cold of space? Simply because the protoplasm of their tissues, based on water, would instantly become solid, and in solids as I have said, there can be no real life except perhaps in the form of suspended animation.

"The Space Men face no such danger, for first, their bodies are protected by this heat-resisting outer covering; and second, the liquid in their veins freezes only at absolute zero, and since it is radio-active—producing heat from within itself—it cannot get that cold even in the void. And that, friends, is the whole stupendous, simple explanation."

"And how do the Space Men's vehicles move?" asked Jan.

Hekki shook his head. "Except that a strange propulsive ray is involved, I know very little about it. I have not yet discovered how the Space Men manage to produce the ray. The works of Nature ever surpass the works of man.

"And that is all I have time for now, my friends. Breakfast is ready aboard ship. Enjoy my hospitality to the fullest!" Hekki's mask of smiling sardonic cruelty had dropped again. He waved something to Sega.

JANICE, sensing that she was about to be separated from her lover, threw herself into his arms. The series of things she had gone through in the past twenty-four hours had frayed her nerves almost to the breaking point.

"Don't let them take me away from you, Austin. Don't let them! Oh, Hekki, please!"

Hekalu's face reddened, and then Sega tore the two apart. Shelby struggled but it was useless. Sega's huge muscles were quite equal to the task of mastering a dozen of the best fighting men of Earth.

He dragged his captives aboard the *Selba*, and guided by the inscrutable Koo Faya, locked them in chambers from which escape would now be definitely impossible. Jan was thrust into the room she had occupied before, but Shelby was put into a chamber somewhat larger than his original prison.

An almost ungovernable fury had taken possession of the young Earthman. If for only a moment he could get his hand on the smooth Hekalu! His fingers clutched and unclutched spasmodically as he hurriedly paced the room. When presently, he found himself hammering on the walls with the frenzy of a trapped gorilla, a realization of where he was headed came to him. "Stop where you are, you fool!" he muttered to himself.

He went to the table where an appetizing breakfast was set out. He ate a little and then waited a while. He wanted to make sure that the food was not drugged. Half an hour passed and he felt no ill effects. He ate the rest of his breakfast. Then he made several attempts to signal Jan by tapping on the walls, but he was quite sure that to get a message to her in this way was now out of the question.

For a long time he gazed out into the sunlit valley floor from his window. Preparations of some kind were under way. It looked as though the entire population, which must have numbered close to fifteen hundred Space Men all told, was getting ready to move away *en masse*. Scores of the strange black people were hurrying about, lugging loads of weapons and hundreds of large cylindrical objects into four immense box-like things of dull metal. Several vehicles, resembling machines of the Space Men, but many times larger, were clustered together in a group.

It must have been several hours after Shelby had been taken into the space ship that two of Alkebar's people came to his room, carrying between them the unconscious form of the Space Man who had been Jan's and his fellow prisoner during the night of their arrival on Mars. They threw the limp giant down carelessly on one of the bunks, and without a glance at him or the Earthman, they stamped out.

Shelby would have liked to examine his cell mate more closely, but owing to the chain which had again been fastened to his ankle, it was impossible to get nearer to him than four yards. Who was this creature? His gorgeously bejeweled harness and his huge size seemed to indicate that he had been a leader of some kind. Shelby had noticed that all Space Men who had a right to command, were somewhat larger than their fellows.

All through the long Martian day Shelby paced the length of his tether, pausing occasionally to look out of the window and to think. By nightfall he was in a state bordering upon complete dejection. Not that he was weak; Shelby could face trying situations shoulder

to shoulder with the stubbornest and cleverest men that Earth or Mars could produce. But he was human and had his limitations. Recapture after a glowing promise of freedom and safety for his people, his love, and himself had almost crushed him.

Only half interestedly he wondered when Hekalu Selba would strike. He knew that it would be very soon. In vain he tried to tell himself that he had no real proof of the Martian's power, but always a vision of those black horrors swooping down like living thunderbolts upon Taboor or New York or Chicago made him realize how futile would be any resistance that the planets could offer.

Even if there were but fifteen hundred Space Men, and Shelby was certain as actual knowledge that there were many more, and even if they must fight with their bare hands, still they would be a formidable menace. Within an hour's time they could strike in a dozen different places on the surface of a planet. Shelby did not know that already there were forces of Fate in action which neither he nor Hekalu Selba himself had been able to foresee—forces however, which boded no good for the worlds.

Koo Faya brought the Earthman his noonday and evening meal. With each came a note from Hekalu, both exactly alike: "Remember the Atomic Ray." Doubtless the Martian sought by endless repetition of this message to undermine his captive's nerves to a point where he would divulge the secret.

At dusk there was the sound of activity aboard the *Selba*—muffled shouts and the drone of generators being tuned up. Then the slow rocking and swaying of the vessel which told that her levitator plates were in action, raising her off the ground, through the atmosphere and out into the void.

Shelby looked out of the window, saw that the stars were growing brighter and the sky blacker. A searchlight was playing from somewhere on the ship, for in the shadow of the planet it was very dark. The beams swung back and forth stabbing through the swarms of Space Men who flew in a cluster about the *Selba*. The lights lingered for several instants on the forms of four great metal cubes that were being lifted up through the gaseous envelope of Mars by a number of the larger discs the Earthman had seen resting beside them in the valley that day.

Shelby threw himself upon his bunk. He gave one quick glance at the blob of darkness on the other bunk at the farther end of the room, wondered vaguely who or what the creature could be, and then, mentally and physically exhausted, went quickly to sleep.

WHEN he awoke Shelby spent many minutes staring at his fellow prisoner. There were indications that his consciousness was returning for he stirred frequently. Presently he who had been the Earthman's and the mysterious one's jailer in the hut the night before, came, bearing a bowl filled with a purplish radio-active liquid which served the Space Men as food. He also carried a hypodermic syringe and a small glass container partially filled with a clear fluid.

These last two articles he placed upon the table, while he carried the bowl over to his charge. He shook the lacerated and bejeweled Space Man roughly and when he had aroused him to a sluggish half-consciousness, held the bowl of liquid food to his lips. Mechanically the prisoner drank.

Shelby looked at the tiny vial on the table and then at the back of the jailer. Close beside the vial stood a glass partially filled with water. The Earthman had drawn a drink from the tap shortly before going to bed, and had left the tumbler standing there.

The idea that had now entered his head had no real purpose. He recognized it as no more than a practical joke, plain and simple; but the idea was clamoring for attention. He would pour out the drug, which was almost certainly meant to keep the giant captive senseless, and replace it with harmless water. The jailer would not see for he was very busy. A little noise, the rattling of the chain or the tinkling of the glass as it was set down, would not matter, for though the Space Men may have possessed a very delicate touch sense capable of detecting faint vibrations in solid objects about them, Shelby knew by now that they had no real organs of hearing.

And so, quickly the deed was done, and quickly he returned to his bed feigning sleep.

It was a long time after the jailer had departed before Shelby's trick bore fruit. The huge prisoner rose to a sitting posture and looked about, a trifle dazedly at first. He surveyed his wounds, felt over himself tentatively, and then glanced at Shelby. The Earthman saw that the fogginess was clearing from his big eyes. There was a questioning expression in them.

Shelby thought that there was a slight chance that the colossus might be able to read his lips even though he could not hear. "Who are you?" he questioned in Pagari.

Apparently the creature understood, for immediately he turned, and with his forefinger slowly traced out on the wall behind him in the planetary symbols: "Friend of enemies of Black Emperor and of Man from Fourth World."

Shelby was taken aback by the Space Man's startling knowledge of things of which he should know nothing. "That makes me your friend," he wrote, smiling.

The giant nodded, and for almost a minute stared fixedly at the Earthman. There was a strange appeal in his eyes. Finally he turned, and laboriously he traced a quaintly worded message on the wall: "Think hard to know what I go say," he wrote.

Shelby had heard a good deal about telepathy and thought transference, depending on etheric vibrations of some kind, supposedly originating in the mind of one individual, and capable of being detected and interpreted by the mind of another. Several savants of Earth and Mars claimed to be adept with it, but owing to the fact that to master the art required a long period of intensive practice, it had not come into general use.

Could it be that this savage of the void was claiming knowledge of it? Sensing the meaning back of the odd words, the Earthman bent every fibre of his will to the task of concentrating on the idea of communication. He gazed fixedly at the eyes of the black mystic, and presently felt a slight tingling about his temples, and then, within his brain it seemed that a tiny voice speaking with a queer wording and a peculiar accent, came to life. It was odd to look at that blank impassive face and hear those words!

"I know you to be friend of mine," the voice said. "I read it in brains. You free me from sleep. But where are we? What Fourth World Man do? What for you here?"

Briefly Shelby outlined the events of the past few days, starting with his meeting with Hekalu. However, he was careful not to make any mention of the Atomic Ray. Then, partially through curiosity, and partially in the hope that the information might be helpful, he mentally asked his companion to tell him more about the Space Men's relations with the Martian.

"Everything maybe all right," said the giant. "Maybe

everybody happy at last. Who know? But I tell you. We Star People—my people Star People. For a long time, oh, for very long time, we wander out there in empty places. One million year, two million year, who know? We free. Maybe find little planet—we camp there—soon go away. We fight, we hunt. Oh, there very many of us! Like sand in sky!

"One day some of us find your sun. We land on little world. Stay long. Man from Fourth World come in ship. We frightened, but he make friends. Bring us gifts. We give jewels and things we make. He learn our sign language—talk with us—tell about his world. Go away but soon come back. Bring more gifts—want more jewels and things. He take some of us with him to empty desert where nobody live. Tell us to bring jewels there to trade, but always be careful no one see!

"He make friends with Black Emperor. They plan. Gather big army. But many not like Black Emperor and Fourth World Man. My father, big noble, not like them; I not like them. They never good to us—make our people work hard, and take away our animals.

"Civil war soon—my father lead many little tribes, but Black Emperor and Man from Fourth World win. Have many strange weapons. Make peace for big conquest war, and I am hostage on Fourth Planet.

"Mars man good to me at first. I learn languages—both Pagari and Earth language. I learn to throw thoughts. My father learned from Mars slave. Then bad things happen. Fourth World Man not like me to throw thoughts to my father so far away. He give me sleep drug. When my father lead revolt again, Mars Man torture me. Now, as you say, he take me back to place where army is, on two little worlds."

A gleam of hope came into Austin Shelby's eyes, but it passed quickly. His lips curled bitterly. It was not well to base one's hope on the assertion of an unknown savage that he could hurl his thoughts across millions of miles of space.

"By what name are you known, Man of the Void?" he asked.

The voice in his brain spoke again: "Mars Man call me Ankova." Here the giant made a darting gesture with his hand. "Mean same as so in my sign language—Darting Meteor."

"I see. Can you communicate with your father now, Ankova?—get help?"

The Space Man nodded. "My brain clear now," he said. "Sleep drug not bother me any more. I talk right away."

CHAPTER VIII

The Battle in Space

HE LAY back on the bunk and for several minutes stared fixedly up at nothing. The performance was reminiscent of the seance of an ancient spirit meeting. He sat up, and again his big eyes fastened themselves upon Shelby, and the uncanny voice spoke in the Earthman's brain:

"I get father. He on scouting expedition—very close. He bring five thousand men to rescue you and me. They get here maybe three, four hours. My father—his army same weapons as Black Emperor's. Flash, flash—all gone—everything gone."

There was the sound of movement beyond the door. Shelby waved his hand in a quick downward gesture which Ankova interpreted correctly. He slumped limply upon the bedding in a very excellent counterfeit of unconsciousness. And then Hekalu Selba entered. His face was white as chalk, and yet there was nothing in it that hinted even of a trace of fear—only icy calm. Behind him was Sega.

"Mr. Shelby," the Martian said with slow cool deliberation, "think well. Either you will reveal the secret of the Atomic Ray immediately or I shall have you immersed in the juice of the flame flowers."

Austin Shelby met Hekalu's chilly stare with a taunting smile. He sensed in the Martian's manner that his plans had met with some serious danger.

"Though I am your prisoner," he told him, "I believe that I can defy you. In the first place I do not fear the tortures that you might inflict upon me." Here he took a tiny glass capsule from his sleeve pocket and placed it in his mouth. "I do not mean by that that I am super-human, that I can endure any pain. But should the torture become unbearable I would crunch the poison vial which I have carried since I joined the Sekor fraternity back on Mars, between my teeth and bring death. That, I am not afraid of. Besides, I could give you the formulas for almost any number of unknown compounds, any one of which might be the missing crystal for all you might know. It would be several hours before you would discover that I had not given you the right one."

The Martian's face grew even whiter and harder at these words. Thoughts and plans flashed through his mind. Should he tell the Earthman what had happened—that Alkebar, the Black Emperor, had secretly slipped through the air lock into space?—that he was certainly intent upon conquering the planets alone? It would not be hard to convince the Earthman that the savage Alkebar would be an infinitely more terrible and ruthless master than any human being ever could be. Perhaps he could win Shelby to his side for as long as he needed him. He was wavering, and then, with the sudden rush of inspiration a better idea came.

"I have told you many times that you are clever, my friend," he said with some slight show of his old careless air. "Again I compliment you. But listen carefully: suppose I took the girl—put her in the gentle embrace of the juice of the flame flowers—told you to produce a formula that would work before I released her?"

The effect on the Earthman was electrical, but it was not quite what Hekalu Selba had expected. The blood red haze of murder rushed before Austin Shelby's eyes, and with movements more suggestive of a wounded panther than a human being he leaped from the bunk and tore for the Martian with flailing fists. He gave no thought to the idea that what Hekki had said might be only a histrionic gesture.

"Oh, God!" he shrieked raspingly, "You Devil! You unutterable stinking, rotten fiend!" But it was a wild useless move. Hekalu was lightening quick and sure with the pistol. He inflicted death, or merely produced a disabling wound almost at will. And so it was that Shelby sprawled senseless on the floor with a nasty though not very dangerous bullet wound across the side of his head.

Sega and the Martian were bending over him, and then again the unexpected happened. An ebony form whose great hands and incredible muscles seemed quite equal to the task of tearing a gorilla limb from limb, arose from the other bunk and towered over the Prince of Selba and his Space Man companion.

The former, hearing a slight sound, turned, and realizing his peril fired two shots at the mountainous monster. Then he darted agilely for the door. He gave one quick backward look—saw the hand of Ankova descending with trip-hammer force upon the skull of Sega, and then slammed the stout portal behind him.

Sega had been unfortunate, but now all his troubles were over for his neck was broken. Ankova transferred to his own belt the weapons of the corpse—his heavy pistol—his case of atomic grenades—his bejeweled war club. Then he devoted his attention to Shelby.

Gently he carried him to the bunk and made awkward attempts to bandage his head with strips torn from the bedding. Satisfied at last with the crude but effective results of his efforts, he strode to the window.

For a long time he stood there, staring. But he saw nothing that interested him. The ether all about was crowded with Space Men coursing with the *Selba*. Except for a gentle swaying shifting movement they seemed to hang perfectly motionless in the void, and yet their speed was many miles a second.

The fantastic cavalcade aroused no wonder in the mind of Ankova, for to him they were as prosaic and commonplace as the grass under the feet of any Earthian. He cocked his head on one side as though listening. Perhaps at that moment something was coming to him from across the endless regions of the etheric desert—something which only his incredibly refined telepathic sense could detect.

HIS unshod feet sensed the faint vibration in the metal floor. Someone was approaching the room. First taking the precaution of tearing Shelby's chain from the wall, he turned and waited before the door with ready war club. He did not wait long for it banged open almost immediately. A Space Man appeared. Behind him were others.

Ankova did not ask their mission for he saw that they wore the insignia that meant loyalty to the man from the Fourth World. Instead he leaped in to close quarters. His whirring war club, toothed with sharp spikes, ripped and tore at the head and shoulders of the unfortunate warrior. Falteringly, the creature tried to parry the blows with his own weapon; but it was useless. Before he was able to attain his fighting stride he was down, the purple radio-active liquid that flowed in his veins in lieu of blood, dyeing the threshold. His lips curled in a grimace of agony, but he made no sound—mute he had lived and he died in the same manner.

Ankova stepped over the prostrate form and engaged the one who had stood behind him. The second Space Man fared little better. He made but a brief and unsuccessful defense and then he too went down. And so Ankova, who before his capture had won fame among the tribes of the Star People as one of the mightiest fighters that their race had ever produced, battled on in the narrow passage until the seven Space Men whom Hekalu had sent to put him and Austin Shelby under restraint were either dying or dead.

The victor glanced down the corridor—saw at the farther end a small portion of the control room's interior. Koo Faya, the Martian, was there, working with demoniac haste over switches and dials.

Ankova drew his pistol, started to aim at the slave, and then thought better of it. There was a tenseness within the hull of the *Selba*—something which made a deep impression on Ankova's keen intuition. His muscles tautened and a tingling sensation rippled over his ebony hide. The vibrations of the rocket motors were more noticeable than usual. Evidently the ship was tearing along at the greatest speed it could attain. And it swayed unnaturally.

Ankova knew the layout of the *Selba* well, for he had traveled in it often. And now he sensed quite clearly what was happening. He hurried to a supply room and selected a space armor from a rack. His Earthman friend might need it. Then he dashed back to the room in which he and Shelby had been imprisoned.

A glance out of the window confirmed his suspicions as to what was going on. The force of Space Men which was acting as an escort for the *Selba* had arranged itself in a sort of spherical protecting network around the craft. Another and superior force was attempting savagely to pierce this formation. The foes of Hekalu's henchmen would draw themselves into cone-shaped groups and rush the defenders, and the latter would swarm over the cones like angry and determined hornets. A hot fight was in progress out there. The ether was lit with green flashes of light, and fragments of the bodies of Space Men and their vehicles already strewed the void. In this running battle the *Selba* was not idle. Her torpedoes were exploding among the attackers with blinding glares of light.

Ankova wondered who the would-be destroyers of the *Selba* were. Clearly they were not the forces of his father, for they had not yet had time to arrive. Some stray tribe perhaps. He wished that he might see their insignia, but owing to their distance from the ship and their eccentric movements, this was impossible. He did not know that they were the minions of Alkebar who had turned enemy to Hekalu but a few hours before.

The Space Man realized that for the time being he was safe enough, but he took the precaution of planning for escape from the ship should it become necessary. He eyed the heavily glazed porthole. A few deft blows with his war club would shatter that. Beyond, there were a few discs without Space Men circling about. With luck it would be possible to capture one. First he barricaded the door with metal bars torn from the bunks, and then put the space armor on the still senseless Earthman. Then there was nothing to do but wait.

The battle was going against the defenders. Shattering concussions of atomic projectiles banging against the *Selba's* hull made the hurtling vessel pitch and roll frightfully. The thunder of shells waxed and waned.

It must have been over two hours later that a huge torpedo set in motion by the forces of the Black Emperor, struck the ship. The explosion rolled her completely over, and tore a jagged though not disabling hole in her side. The air puffed out from the control room compartment, but the men who labored so feverishly there, were clad in heavy space armor, and aside from being badly bruised they were unhurt.

The torpedo was the last gesture of the Alkebarians. Ankova saw a cloud of luminous specks approaching from the void at terrific velocity. They grew rapidly brighter. A blue and an orange star shot up from their midst—the identification signal of Telaba, Ankova's father. That signal was quite enough for the Black Emperor's men. Without waiting to argue they turned and fled. So quickly did they go that Telaba's warriors were unable to identify them.

THE rebel tribesmen were checking their speed now, preparing to fight. But still they came on apparently like hurtling comets. They swept the remnants of Hekalu Selba's loyalists before them in one terrific charge, and then they were swarming over the *Selba* and through the rent in her side. There was a brief flurry of pistol shots from the crew before they were captured and bound.

In a prison compartment aft, Austin Shelby had regained his senses sufficiently to have a vague idea of what was going on around him. Ankova was support-

ing him, and he was staggering toward the door. His mind took up a train of thought from where it had left off. He was calling for Jan and cursing Hekalu. Cased as his head was, in an oxygen helmet, his shrieking voice was magnified a dozen times, and assumed a weird vaulted quality that startled him back to sensibility.

Ankova read his thoughts, and by telepathy replied to him: "Your lady? I forget. But we find her. She all right—sure!"

The Space Man removed the barricade and opened the door. The sudden outrush of air from the room almost toppled Shelby from his feet. And then the Earthman heard a familiar voice in the head-phones of the radio with which his helmet was equipped: "I'm in X7, Austin. Let me out if you can."

"Janice!" he cried, and with new vigor hurried to the door of the room she had mentioned.

Ankova smashed the lock with his war club and the portal flew open. Jan was standing there encased in space armor. She was trying hard to smile.

"You're safe, darling!" Shelby cried, "And I thought that that fiend was going to hurt you!"

"My luck," she said. "Koo Faya was thoughtful enough to bring this space armor, otherwise, I wouldn't have been fit to look at any more." She pointed to a shattered window. "And you—heaven's how you can yell—and swear! I am ashamed of you!"

Her eyes widened when she looked at Ankova, but Shelby reassured her. "This is Ankova, and he is our friend—big shot, too," he said. "And Jan, I guess we're free now—really free."

Ugly Space Men, some of them gashed and wounded, crowded about as though bent on destroying the two feeble Earthians. But with imperious gestures Ankova waved them back. He conversed by signs with these warriors of his father, and then took Janice Darell and Austin each by the arm.

"Big surprise," he told them. "Come."

He led them to the control room. And there, in the grip of a black colossus was Hekalu Selba—captive. The Martian nodded perfunctorily to the girl and then turned his level gaze toward the man. His face showed no hint of anger, and it seemed that a shadow of a smile twinkled about his lips.

"Here we have a contrast, Mr. Shelby," he said quietly, "triumph and disaster staring at each other!"

Shelby told him that he should be wreaking vengeance on the noble for the numerous wrongs he had done him, but the calm unflinching attitude of the Prince of Selba made him almost like the captive.

Shelby waved the Martian's captors back and he stood free. "There is no contrast now, Akar Hekalu, for an outsider could not tell which was which!"

As Hekki's jailer led him away, Shelby, assisted by Janice Darell, busied himself with the ship's controls.

And so the battered *Selba* escorted by five thousand Space Men set out for a certain minor planet where were amassed the forces of Telaba, insubordinate vassal of the Black Emperor. And on another planet was Alkebar, the Black Emperor himself, ready to hurl his shock troops, a horde five million strong, at the planets.

CHAPTER IX

The Revolt of Alkebar

THE light of a shrunken sun shone down coldly and ineffectually upon a jagged and distorted landscape. Along the horizon, which was strangely abrupt, twisted gray hills loomed up with harsh clearness against a black starlit sky. There was no atmosphere to soften their lines, nor to dull the needle-like points of deepest sable that were their shadows.

In the foreground, which was a fairly level plain, were hundreds of hemispherical shelters hastily built from loose fragments of rock. A vast horde of Space Men hemmed them in. The sunlight glistened on the ebony hides of the warriors and on their polished accouterments and weapons. Some of these rebels of the void were greedily drinking the purple radio-active liquid which meant life and strength to them, and attendants were hurrying about carrying large canisters of the food to each unit of Telaba's army. Most of the men crouched expectantly beside their discs, waiting.

In a small metal building, which the Man from the Fourth World had recently had constructed for his own use, four people were gathered. Two were Space Men, and two belonged to the green planet called Earth. One of the Space Men was talking, not with his mouth for he had no vocal cords, but by means of fine mental vibrations which caused a feeble high-pitched voice to speak within the minds of the Earthians.

"I owe you great debt of gratitude, Mr. Shelbee—you help to save my son from Alkebar and Fourth World Man. Telaba do not forget this. I do what I can. But that is little. Black Emperor start to smash Earth and Mars soon. Perhaps right now. Perhaps in hour. Who know? Spy send signal any time now. We outnumbered ten to one. Alkebar crush us, wipe us out like that!" He slapped his palms sharply together. "But we do what we can, Earthman."

Shelby took Telaba's cold hand for a brief hearty handshake. "Thanks, Telaba," he said simply. "Jan and I certainly appreciate what you are going to do for us and our people, and I know that if we are successful, the worlds shall be mighty grateful too. They have ways of showing their gratitude. But don't be so sure that we are going to fail. We have the *Selba*, you know, and a new weapon that has never before been used.

"Hekalu was good enough to construct an immense projector for us. Except for the resoldering of a few wires, and the insertion of a tiny but important crystal which I happen to be carrying with me, it was complete and ready for operation.

"The ship is fueled and ready for action at any moment. When the word comes and we set out, annoy the forces of Alkebar, but do not engage or mix with them any more than you have to. I'll be somewhere around, ready and glad to spray them."

"What do you mean, 'I'?" Jan put in. "It's 'we,' because I am going along!"

Shelby knew that the undertaking he had in mind was but an ace from certain death; but he did not argue with the girl. Her cool wit and nerve would be very helpful, and besides there was little choice, for death was grimly in pursuit of all of them.

"Right you are, soldier," he said laughingly. "My mistake!"

A red light bulb flashed on the wall, and then, without waiting for permission, a Space Man rushed into the room, his arms waving wildly, forming frantic signs of the Star People's deaf mute language. Bent in a half crouch, his great arms flexed, Ankova translated for the benefit of the Earthians:

"Fourth World Man escape—in *Selba*. We are betrayed—someone help him. He out of sight already. Going to help Black Emperor. And now red star burns in space—spy's warning—Alkebar forces start!"

Telaba rushed to a big lever and pulled it. Immediately a huge trip hammer began to pound ponder-

ously on a metal plate set in the ground outside the building—sending vibrating pulsations out through the crust of the planetoid—the alarm signal which would be sensed by everyone of Telaba's men, telling them to be ready for instant action.

The four looked at one another. Each knew what this last move of the Prince of Selba meant, but no one thought for a moment of giving up the fight.

"It won't do any good to pursue the Martian," Shelby cried. "That ray projector of his—he'd blast us out of existence. All we can do is try to hinder Alkebar's invasion—seek to delay him. If I could only somehow get through to Mars with the secret of the Atomic Ray! Telaba, haven't you a ship capable of carrying a large enough oxygen supply to last me for the journey?"

"Never mind!" Ankova cut in. "I go! Many times I been to Mars. Give me plans. I go right away. I get them to fight."

Shelby drew from his sleeve pocket the black case containing information concerning the Atomic Ray which he had recovered from Hekalu Selba at the time of the Martian's capture. He opened it, and with his stylus added a brief message to the mass of notes inside, and wrote down the formula for a certain complex chemical compound. Then he handed the case to the Space Man.

"Take it to Alman Mak in the Checkald of Taboor if you can, Ankova. Good luck."

The son of the rebel chief hurried from the room with the missive in his hand. Shelby knew in his heart that to attempt to get Earth and Mars into action in time was a useless gesture, but he could not suppress a thrill of admiration for this wild son of the void. There was hard mettle in Ankova's makeup, hard and true. And most of them were like that—most of Telaba's men anyway.

"You two come with me," Telaba was saying. "We fight together. Put on space suits." He was tapping an instrument resembling a telegraph key. In unison with his movements the heavy signaling hammer sounded out orders and commands to his forces.

WHEN the Earthians had eased themselves into their heavy protecting attire, Telaba led the way down a spiral stair and through an air lock, out into the open. Here everything was grim silent activity. Group after group of mounted Space Men poured skyward. Telaba's army was a mighty thing; with luck it might have beat down the resistance of either one of the two planets. But when compared with Alkebar's colossal horde, it paled into pitiful insignificance.

Nearby, a space disc, which must have measured fully two hundred feet in diameter, rested. The three mounted the light ladder which led to the interior.

In the metal walls were mounted two heat-ray projectors of Martian design, as well as several torpedo catapults and machine guns. Two Space Men were inspecting them.

Telaba signaled to the driver who knelt with lever in hand. The great disc trembled and the propelling force which no human being had yet learned how to produce, sent it and its burden hurtling toward the stars. The minions of the rebel chief circled and swirled about their commander's ship in wild soundless salute.

Telaba was operating the signaling mechanism which fired lights of various colors up through the roof of the armored coach, and in reply to his flashing commands, his horde formed a monster cone which shot with ever increasing speed through the void.

A sickening giddiness came over the two Earthians, for there were no devices to produce artificial gravity here. It was the space nausea which had made early interplanetary travel such a nightmare. The Star People, born where gravity is almost unknown, were of course not affected in the least.

Clinging to stanchions and hand grips to keep themselves from floating free, Janice Darell and Austin crept about the floor examining the weapons and scanning space ahead for signs of the enemy. They disliked to admit to each other that they were very sick; but if they thought that it was possible to forget the retching pains in their stomachs by diligent devotion to other things, they were mistaken.

Their suffering continued until Jan remembered that the force of this almost forgotten malady could be reduced by lessening the amount of oxygen taken into the lungs. A few turns of the intake valves of their helmets accomplished this, and they soon felt much better.

It was a long time before there were any indications of the near presence of the enemy. Ahead, two asteroids glowed, a dull red. One was quite close; the other farther away. It was Shelby, peering steadily through his binoculars, who first discovered the glowing cloud, thin and faint like the nebulous substance of the Milky Way, pouring up like ghosts' hair from the rounded pate of the nearer asteroid. He knew that it was made up of countless points of light, too small to be detected individually. Not long afterward Telaba discovered a similar cloud coming from the second of the minor planets.

The rebel chief's greatest advantage, if he had any at all, was that of surprise. Because of its comparatively small size his force had probably not yet been discovered by the enemy.

Coolly he flashed the order for long-range bombardment formation. Instantly the army spread out, forming a thin rectangle whose broadest surface was perpendicular to the line of firing between the opposing hordes.

A second or two later the first rocket torpedoes of the rebels went, spewing fire, toward their goal. In a steady swarm others followed them. The missiles were not radio controlled and fitted with tiny television apparatus as were a few of the torpedoes employed by the Interplanetary Traffic Lane Patrol, but since the approximate range was known, it was easy to set the time fuses so that the atomic charges would explode in the midst of the densely-packed enemy.

Without asking anyone's permission, the Earthians had appropriated a pair of catapults and were working them like demons. As fast as they could cram the ten-pound rockets into the breeches of the tubes, the projectiles streaked out in flashes of green flame toward the nearest of the nebulous clouds.

Shelby was sweating furiously from the exertion, and the moisture absorption apparatus of his space armor was putting in some tough service.

Occasionally he glanced at Janice working beside him. Her face, visible through the glazed front of her helmet, was white and set—almost hard. And there was boundless determination in the firm curve of her little rounded chin. He liked her attitude, but it was better to take it easy until the real fighting began.

"Slow up a bit, soldier," he remarked into his transmitter. "Powder your nose!"

Her face brightened as she turned toward him. "I wish I could powder my nose," she said, pouting. "Only I can't reach it!"

"Too bad. These space suits rob a girl of so many of her exquisite little tricks."

"Well," she put in, "I can still cover up my yawns with my hand if I find this pastime too much of a bore." They both chuckled at this little joke.

Janice took the last missile from the case she had been emptying and rammed it home. She jerked the lanyard, and with a thudding jolt the torpedo was on its way. Then she paused to scan the horde of Alkebar through an observation port. "Hurrah," she cried, "we're scoring!"

WITHOUT discontinuing his hurried feeding of his smoldering piece, Shelby looked up. The cloud had grown considerably in the few moments of action. It had cleared the asteroid now, and the other nebulous spot that marked the position of the Black Emperor's second army, was coming up to merge with it. In the midst of the first cloud, hundreds of minute specks of light were flashing—the atomic torpedoes were exploding. The sight reminded Shelby of what he had so often seen through the lens of a spintharoscope.

Alkebar's army continued to increase rapidly in apparent size. It looked like a monster amœba. But now the amœba was beginning to writhe, to swell up and grow dimmer. It shot out long sinuous pseudopods that seemed to grope angrily. Both Earthians sensed that the fight was about to begin in earnest.

With renewed vigor they fell to the task of loading and discharging the catapults; and close beside them the two Space Men who acted as gunners, labored coolly and methodically over their weapons, but with even greater efficiency, for their training had been long and thorough.

Telaba worked the levers of the signaling mechanism, and a brilliant purple star visible to all his henchmen shot up over the back of his beast. They saw it and read its meaning. Spread out to avoid enemy fire! As one man they obeyed, but they were none too soon. With abrupt suddenness the maelstrom of silent flashing death was upon them.

It was a pretty sight to the Earthians—those soundless globes of green flame that glowed dazzling for an infinitesimal instant, on the rich jewels and polished rifle barrels of the hordesman coursing close by. But they were not deceived.

A Space Man vanished, torn to tiny fragments that mixed with the cosmic dust of the void. A huge disc, bearing a cylindrical battle car, was hit, and a jagged hole torn in its side. It twisted crazily, turning over and over. Austin and Jan felt the vibration of shell fragments banging violently against their own vehicle.

The nearer nebulous cloud had ceased to be a cloud now. It had resolved itself into a myriad swarm of dim specks which the Earthians knew were Space Men. Plainly Alkebar's minions were charging rapidly, bent on wiping Telaba's smaller force out of existence at one blow.

The bombardment doubled, tripled, quadrupled in intensity until it seemed that all space had turned to fire. Before the withering blast the army of the rebel chief was speedily being dissolved into drifting wreckage.

An exploding torpedo ripped several yards of armor from one side of Telaba's vehicle and reduced one of his black gunners to a mangled pulp from which the purple fluid spurted.

The force of the concussion turned the great disc completely over. Battered and blinded by the green glare, which exceeded even the sun of the void in intensity, the Earthians tumbled against their weapons. Janice Darell started to scream but managed to check it—biting her lips savagely.

An explosive rifle bullet struck the huge vehicle, and it wavered.

Shelby spoke to Telaba who was clinging firmly to a stanchion with one hand and operating his signaling machine with the other. "Turn back, chief," the Earthman advised. "Our only motive is to annoy them and delay them. To continue this charge can mean nothing but destruction for our entire force."

Telaba sensed the mental vibrations that went with Shelby's words. "To turn back cannot do, Earthman," he said. And it seemed to the young engineer that there was a vibrant note of sadness in his telepathic voice "Look! You see all guns and catapults point forward only. Not swing to rear—same on all gun cars. If run, not possible to shoot at chasing enemy. Then they get us. That Alkebar's idea so his men must take offensive or die. He think that make them strong."

"But the riflemen are not so handicapped," Shelby persisted. "We can die here if necessary, but someone must live to carry on. Order them back!"

The chieftain shook his bulbous head. "To try what you say—useless. They not desert comrades or king. If I command, they disobey." There was a finality in his words which neither of the Earthians tried to dispute.

So that was it! Well, there was no sense wasting time talking. Shelby gripped a machine gun and sent a spray of explosive bullets ripping out into the ether. Janice did likewise.

As they worked their weapons they spoke rapidly to each other. "You understood what Telaba said? You know what that means?" Shelby asked.

"Yes. It's about the end of our tape, but that's nothing. We've been fairly lucky. All we can do now is hope that Ankova wins through to Mars in time, and fight like—like—"

"Hell!" Shelby's words slipped between clenched teeth, and Jan flashed him a quick smile even as their tracer streams crossed in the midst of a group of hurtling Alkebarians who had pressed too close together.

"Anyway, good luck!"

"And the very best of luck to you!"

The opposing forces were very close together now. The first of the Alkebarians were plainly visible—their long guns flashing—their ebony arms waving signals which probably passed for shouts of triumph among their ranks.

CHAPTER X

The Coming of the Atomic Ray

BOTH armies had cut down their velocity enormously, but still they tore along at breakneck speed. And they moved like true Cossacks of the void, directing their machines by deft motions on the mysterious levers. Now diving, now climbing, now swinging this way and that to avoid the missiles of their opponents, they tore on. And death was everywhere.

No torpedoes were flying now, but machine guns and rifles were working terrible havoc. And so the horde of Alkebar closed with the forces of the rebel chieftain.

The machine which bore Telaba, directed by its skillful driver, dived and swung and zigzagged like a mad thing; but still the bullets rattled against the metal armor of the car. Its sides had been repeatedly struck, yet owing to its tough shell, had not yet been disabled.

Everywhere about it, mounted horrors whirled in an inextricable tangle, shooting and loading, and dying by the green flashes, their vitals strewing the ether.

Telaba had deserted his post at the signaling machine, for further orders were useless. For his rebels at least, it was every man for himself. He too was operating a machine gun.

The stars spun dizzily about the Earthians, as the machine beneath them careened in its insane flight. Every time a Space Man wearing a red circle on his breast crossed their sights, a burst spat from their hot weapons, frequently with good results.

A group of at least twenty Alkebarians sought to attack from the blind spot at the rear. But the driver twisted levers with a quick jerk, and the luckless riflemen found themselves facing four streams of steel. Those that could, darted out of range and renewed the attack from a different angle.

Frequently, throughout the battle, Shelby had wondered what had happened to Hekalu Selba and the Atomic Ray. Why wasn't he on hand to assist his ally, the Black Emperor? Oh, well, regardless of whether the Martian was there or not the outcome would evidently be the same—only now it would be more dragged out.

The Earthian was surprised therefore, when suddenly the efforts of the enemy to exterminate them, which had been so intense in the brief moments since they had closed, suddenly lessened. Alkebarians were darting hastily toward the rear. Their actions did not suggest flight; it seemed that they were going to meet a new and more terrible enemy. The rebels could wait.

And the people of the rebel chief for the moment did not pursue—did not even fire. For they too saw! To the rear, in the center of Alkebar's horde, came the dazzling flares of explosions. So many and so close together were they, that they looked like a titanic conflagration of green flame. Against the light, the silhouettes of confused and bewildered space riders careened, like frightened pollywogs. The holocaust moved—swung. It was like a tapered column of fire veiled by a faint bluish haze.

The Earthians, Telaba, and the two remaining Space Men, forgetful of everything else, were staring in awed wonder at the phenomenon through the forward observation bay. It was Shelby who found the first part of the explanation.

"It's the Atomic Ray!" he almost shrieked. "Freeing the atomic energy in the materials that make up the bodies of Alkebar's men—literally causing their flesh and bones to explode! But how—what the devil—!"

"Look!" cried Jan. She pointed far up over their heads to where the cone of faintly bluish light swung, free from the milling horde. Up and up to its apex, and there hung what appeared to be a tiny cocoon of burnished silver.

The girl peered through her binoculars for a long moment. "I see the name. It is the *Selba*," she said. "Hekalu has made a mistake—he's attacking the wrong force! Or—or some ally of ours has gained control of the ship!" she hazarded.

"No time to make guess now," said Telaba. "To fight, much better." He had returned to the signaling mechanism, and was working it with cool efficiency, rallying his battered forces.

Like tigers they fell upon the Alkebarians, shattering them out of existence with a steady storm of rifle bullets. They met with only a weak resistance for the foe seemed to realize that the fates had played them false. The blue ray had been their promise, and now, like the sword of their ancient god of destruction, it was weaving calmly this way and that, snuffing them into nothingness. The Black Emperor's horde was dissolving, scattering.

Battalions of terrified Space Men poured past the rebel chieftain's car, shooting only hurried and ineffective volleys at their enemies, who pressed fiercely upon them. And never did Jan and Shelby miss a chance to spray them with searing bursts of machine-gun fire.

There was a lull. The Earthians took the opportunity to look up at the angel of death that was the *Selba*, far above. Most of Alkebar's huge army had already perished, or had dispersed in flight into the desert of space from which it had been recruited. But that the space ship would presently be engaged in a serious fight was evident.

A DETERMINED force which must have numbered a hundred thousand, was hurtling up at it, surrounding the craft with a halo of bursting torpedoes. At the head of the body of Space Men was a huge beast bearing on its back a car similar to Telaba's. Vari-colored signal stars spurted from it. Alkebar himself must be in it directing operations!

Coolly the guiding hand aboard the *Selba* was swinging his dreadful weapon this way and that, annihilating the attackers as one might annihilate a swarm of mosquitoes with a blowtorch. Half of them had already been reduced to those basic, intangible vibrations which constitute all substance. It was terrible, it was glorious; but what could it all mean? Hekalu's ship!

The still formidable remnants of the vengeance squadron was seeking to close in—to grapple with the vessel. The *Selba* was trying to dart out of their way, but the speed of the Space Men, a gift of Nature, was greater than that of this fastest ship designed by man. Grimly, in the face of almost certain death, they kept on. A score or so succeeded in landing on the curving hull, and, like leeches they clung to it. The Atomic Ray arched angrily, cutting a deep swath through those who still sought a hold.

And then the gleaming form of the *Selba* was completely hidden by the swarm of enraged horrors that poured over it. The Atomic Ray was snuffed out. The beholders saw the air lock being pried open, and the Space Men crowding into the interior of the craft. For a second the *Selba* wobbled crazily, and then her rocket motors ceased to flame.

"What are we waiting for? We have friends up there!" Jan cried.

Telaba flashed his orders, and the entire cavalcade charged toward the vessel, their guns spewing flame.

It was only a matter of a minute or so before that hurtling torrent of rebels had swept the Alkebarians from their prey. Those of the Black Emperor's men who had forced their way into the ship managed to hold the entrance for a short time, but under the urgings of their intrepid chief, the zealous rebels shot and hewed their enemies down as though they had been paper marionettes. The way was clear.

Telaba waved an order to his driver, and the space beast drew up alongside the *Selba*. Expectantly eager, the Earthians clambered aboard, followed by the chief.

The ship was a shambles. Its corridors were littered with bodies of Space Men who wore on their breasts the red circle which signified loyalty to the Black Emperor. Telaba's followers had done well.

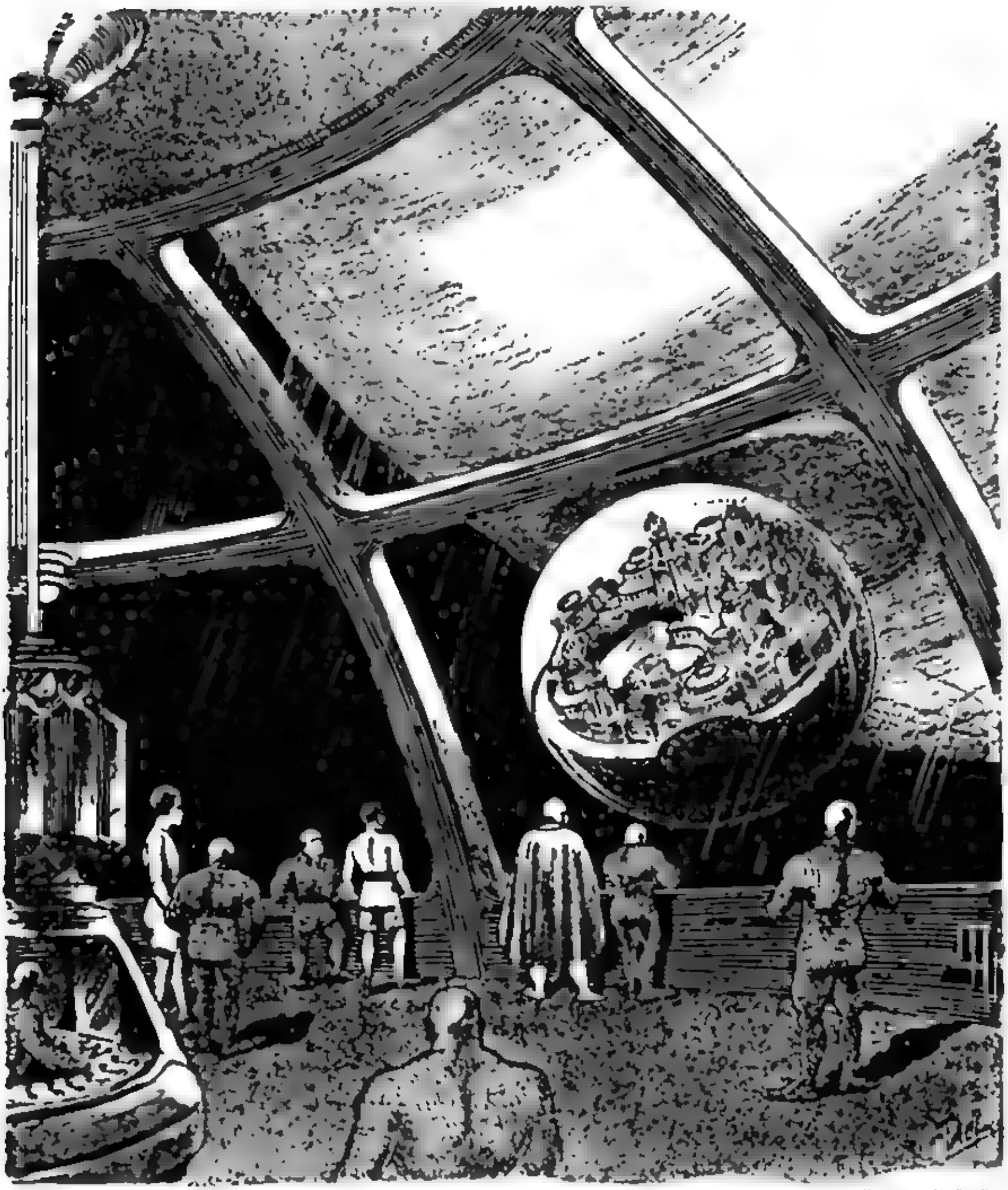
The three made their way to the control room. Intuitively they had sensed what they would find there, and so, they were not surprised at what they saw—wreckage and the carcasses of Alkebar's warriors. The Martian had put up a stiff fight.

Shelby bent over the armored form of Akar Hekalu

(Concluded on page 269)

The Metal Moon

By EVERETT C. SMITH and R. F. STARZL



(Illustration by Paul)

The ship was now coming close to the vast curve of the crystal city. The earthmen became aware that the part below the city level was a dull ugly black.

THE METAL MOON

Based upon the Fourth Prize ($10.00) winning plot of the Interplanetary Plot Contest won by Everett C. Smith, 116 East St., Lawrence, Mass.

EVERETT C. SMITH

R. F. STARZL

IN THIS story, the joint product of two imaginative minds, we get a very unusual picture of some of the possibilities of interplanetary exploration.

We know that as soon as interplanetary travel is possible, expeditions from the earth will be ranging the length and breadth of the solar system searching out the thousands of wonders that are to be discovered.

It is quite possible that some of the explorers, whether through accident or desire, may colonize the other planets and develop under new and unusual conditions a new branch of the human race. It is doubtlessly true that if each of the solar planets were to be colonized, at the end of several hundred centuries there would be nine races of human beings who might differ radically from each other and in fact might not recognize each other as members of the same human stock.

In this story we do not see nine races but we do see four of them and Mr. Starzl has united the four in a gripping narrative of the great spaces.

THE three men in the tiny space ship showed their apprehension as they watched the gravity meters. Something was distinctly wrong with the ship.

"Are you sure that there isn't some undiscovered moon of Jupiter?" asked the youngest of them. He was only about 25, which was very young indeed when his scientific attainments were considered, even for the human race's stage of intellectual development in 1,000,144 A. D. His figure was stocky, powerful, his face rather thin, bold, with piercing black eyes. He was naked, save for short, brilliantly red trunks of metalsilk. His name, "Sine," followed by a numerical identification code, was tattooed indelibly in thin, sharp characters on his broad, bronze-hard chest.

The man at the ampliscope removed his head from the eyepiece and shook his head impatiently. His body was bronzed and spare, but the complete absence of hair on his head made him look older than the 48 years indicated by the code following the name on his chest, "Kass."

"I tell you, Sine, this pull is no gravity effect. No body of such mass could be invisible, unless it were composed entirely of protons. And even then it would yank Jupiter out of shape, making it look like a pear, but there —"

Jupiter presented its usual appearance. The solar system's largest planet seemed enormous at this distance of only a few million miles. It showed its usual marked depression at the poles, but no distortion such as might be caused by a nearby body of enormous mass.

"What do you think, Lents?" Kass turned to the third occupant of the little space ship. Lents raised his broad placid face from the pad upon which he had been figuring a complicated equation. He was a large man, slow-moving, and fat. He was sensitive to that fact, so that, besides the usual trunks, he also wore a toga - like garment. His brown eyes blinked in folds of flesh.

"No doubt you're right, Kass," Lents rumbled in a deep voice. "I can't see how such a body could exist without pulling all of Jupiter's moons to itself. No, we seem to be specially honored by its attention."

They looked at one another soberly.

"The question is, can it out-pull us?" Sine remarked.

"You ought to know," Kass said. "You designed and built her."

Sine made his way forward. It was no longer necessary to use the handholds, for the pull of the mysterious body was already so powerful that it entirely eliminated the free floating so familiar to space travelers. Sine looked through the grated outlook windows, past the gracefully curved bow of the ship. At the very tip was the ether screw of his invention, resembling the screws used for water propulsion in ancient times, except that the pitch was extremely sharp. The tachometer showed that the screw had slowed down to 50,000 revolutions a minute, although the thermometer indicated that the molecular bearings were still reasonably cool. But how long could she stand the strain? How long, indeed, could the sturdy little atomic motor keep those blades turning? It was designed to pull directly away at a distance of only a million miles from the sun, and yet it was being beaten far out here in space by an object as yet invisible.

"What a crash that'll be!" Sine murmured, watching the agony of tortured metal.

Amidship, Kass was again studying the eyepiece of the ampliscope. Suddenly he stiffened.

"I see it! Why, it can't be over a couple of hundred feet in diameter. Cylindrical, I think. Head on to us now."

They crowded around him. Lents, with hasty computations, determined that they were still about three thousand miles from the object.

"No chance to pull away from it, if we pull straight," and his heavy voice was full of energy as his sleepiness vanished with the need for action. "Set her over, Sine, about 40 degrees. Try for a circular orbit around it—if we can get up enough speed centrifugal force will save us!"

Sine did as he was told, and the ship heeled over so that it presented its side to the sinister object, which was still invisible to the unassisted eye. While Kass watched it through the ampliscope, his companions stared through the thick ports at the velvet, gem-studded firmament. They could feel the attraction growing with terrifying speed.

"It's turning with us," Kass announced, "and getting closer. If we can swing around it, it will be a very sharp ellipse indeed!"

"Try and see if you can get a few more revs out of the screw," Lents suggested, and Sine crept forward, his powerful muscles straining against the pull. He lifted the leaden weight of his arm to the lever. He *must* get a little more power out of the motor, or they would crash to their deaths in a few minutes! A fine ending for their daring dash to Jupiter—the first space flight since the great comet swarm of 800,768 A. D.

Sine pulled back hard on the lever, and the motor gamely responded, moaned and shuddered under the tremendous overload. The tachometer needle quivered, began to climb, 52,000, 55,000, 56,000——

The ship gave a lurch—there was a dull grinding, a hollow, metallic groan. The men picked themselves up from the floor—realizing at once the fatal significance of the lack of effort required. Their movement carried them off the floor—made them grasp handholds. Floating free! That meant falling free!

Sine glanced at the tachometer. The dead needle stood at zero. Through the forward window he could see one of the four screw blades, black, motionless.

Lents, obeying the habits of a lifetime, elbow hooked in a handhold, was figuring the time required for them to strike. He looked up with a puzzled frown.

"We should have struck about right now! Check on that body's position, will you, Kass?"

THE bald-headed scientist pulled himself to the ampliscope. But it was possible to see the object through the ports now, quite plainly. It was black, cylindrical, glinting dully in the sun's light. The space ship was tumbling end over end, lazily, bringing the thing into view first at one port—then another.

"No acceleration!" Kass reported, amazement mingling with hope. "Same speed—we may still hit—but no evidence of gravity. We're falling toward it on momentum alone!"

Lents' brown eyes twinkled with perplexity in their pits of fat.

"The force, whatever it is, doesn't seem like anything in nature. But if we're traveling on momentum alone we can pull away with our emergency rockets—though I hate to waste the fuel."

Sine leaped to the rocket controls. "Grab handholds!" he snapped over his shoulder. The men rolled into the padded niches provided for that purpose. Sine's niche was so placed that it would not be necessary to lift a hand against the tremendous pressure of rocket acceleration. A lateral swing of the lever along its quadrant operated the rockets.

"Oof!" came a smothered exclamation from Lents as the ship seemed to pause, to leap forward in space again. The star-studded heavens as seen through the ports were hidden by a curtain of flame, electric blue and as stiff seeming as a steel bar—the trail of the forward rockets.

For some minutes there was no sound save the subdued thunder of the hull as it trembled under the tug of the rockets. Then a light flashed redly and a gong sounded. The signal that meant, "fuel half gone." Sine shut off the power, crawled out stiffly. His first glance out of a port showed that they were still falling toward the mysterious cylindrical space wanderer.

Kass wiped the sweat from his bald head.

"No use wasting any more effort," he said hoarsely. "That thing is a space ship, and there are men in it. The force they have been using on us is some kind of gravity beam—probably it's also their means of space propulsion. They mean to capture us, no doubt——"

"And they've reversed the beam!" Lents puffed as he turned away from the ampliscope, pulling his sweat-soaked toga away from his fat body with thumb and forefinger. "We're decelerating fast, but we can't feel it because the force acts on every particle of our bodies exactly the same as on the ship——"

"Proving," added Sine, looking out of the port curiously, "that it's a true gravity beam!"

The utter stillness of their ship gave the illusion that she was motionless, and that the sinister stranger was drifting toward them.

"It *is* a ship!" Lents rumbled. "Look at her ports. But they're shuttered."

"Not a bad idea," Sine agreed. "Protection against pin-point meteorites, anyway." They saw now that the cylinder was slightly rounded at each end, and the end presented to them had at its nose a circular projection, not unlike a very large button, that glowed with a lavender light, which they guessed to be the source of the gravity beam.

They were torn between the excitement of discovery and a very natural apprehension. In the dim past, more than 200,000 years ago, there had been a regular commerce between Earth and the Jovian colonies. But the comet swarm, coming out of the mysterious depths of space, had released to the solar system such swarms of meteorites as to make interplanetary travel in the spatial belt between Mars and Jupiter utterly suicidal. It required the passing of two thousand centuries to thin them out sufficiently to permit the voyage of exploration in which these three men were engaged.

What would these children of Earth look like after 200,000 years of Jovian evolution? Would they be friendly?

They must, at any rate, be curious people. The great cylinder was passing over them, and they had a better conception of its size. It was at least twice as big as the 200-foot diameter Kass had estimated, and fully 1500 feet long. A section of its hull slid open, and the scientists felt the tug of mysterious forces on their own little vessel. They drifted up into the opening, knew that the hatch had closed by the shutting out of the solar glare. But there was no lack of light. They could see the welded plates of the hull by an intense saffron light that came from oval plates set in the wall. More of the gravity buttons were ranged around the room. It appeared that they were regularly used in handling freight. Now, as the little captive ship was

tugged here and there, the prisoners could see flashes of that penetrating lavender light that seemed somehow solid.

"Get ready, men!" Sine said, breaking off his absorbed contemplation of their surroundings. "Strap on your belts, and be sure your disintegrator tubes are in their clips."

Lents was already lifting his toga and snapping his weapon belt around his ample waist. A mere strip of flexible metal with pockets for the atobombs and a clip for the delicate little tube—it might easily be taken for a mere ornamental article of apparel.

"Hope they're friendly," Kass remarked, patting the buckle shut over his flat diaphragm, "but if they aren't we can give 'em a thing or two to think about."

The quartz ports, kept free from frost on the inside by a curtain of hot dry air blown over them through a slit, suddenly misted over on the outside, became opaque with a milky glaze of frost. This told the prisoners that their captors were "bleeding" air into the hold, which did double duty as an airlock. They heard vague clanging of metal on metal, transmitted to them through the hull of their ship. Then a sharp blade scraped away the ice from one of the ports, and a face peered in.

They looked at one another for a few moments, these cousins of the human race, separated by 200,000 years of time and impassable meteor-strewn wastes of space. The man at the port turned and beckoned to others, who also surveyed the prisoners.

Then the first one, evidently the chief of this massive space vessel, motioned to the prisoners, to open their manports.

"Keep together now!" Sine admonished his companions. "If they act unfriendly we'll let them have the ray. Then you two slip back into your own ship while I grab this vacuum suit out of the lock. With that on I can carve a way out, and disable them, too."

"It would be a shame!" Kass said as he whirled the handwheel of the inner manport, "but——"

The valve opened, and a few minutes later the three Earthmen stepped out to confront the Jovians.

There were half a dozen of them, standing firmly, by virtue of the artificial gravity, somehow produced. They were not far different from Earthmen, except that they were shorter, being barely five feet tall. Their tremendous muscles told of the race's adaptation to the superior gravity of Jupiter. Their feet, encased in slippers of some burnished material, were unusually large.

They were dressed in an armor of overlapping scales that covered every part of their bodies, even their fingers. But their heads, instead of being armored, were protected by a thin, transparent membrane that followed the shape of their features closely. The Earthmen recognized the protective covering used before the comet swarm as a defense against the then used heat ray. So the Jovians had developed no new weapon! Sine thought comfortably of his little disintegrator tube. He could make those armored men vanish like puffs of smoke.

But they made no hostile move, and Sine had leisure to notice their faces. If their bodies were too heavily muscled for grace, their heads atoned for that defect. These were truly Jovian, god-like, combining intense virility, dominance, courage. But there was also about them an expression of intolerance, of ruthlessness, of selfishness. Here were men, it could be seen, who would not be too scrupulous in attaining their ends. But men, too, who could be charming companions.

Their leader, the man who had first looked into the port, now detached himself from the group and came forward, his hand outstretched in the old Earth gesture of friendliness. His appearance had all the characteristics of his companions, but in a more striking degree. He was taller than they, more than five feet, and his broad shoulders had the confident bearing of accustomed command. He spoke, in a pleasant, vibrant baritone:

"Welcome, men of Earth. Sorry for our little misunderstanding."

Sine gripped his hand, returned the muscular grip.

"It took us a little while to know what you were. And I may add that I'm pleasantly surprised that we can still understand each other."

The Jovian shrugged his shoulder:

"Canned speech. No chance for a language to evolve when it's mechanically recorded. But come up to my cabin. It's chilly here, and your manner of dress——"

"*That* has changed!" Sine smiled. "Lents and Kass, will you go ahead?"

CHAPTER II

The Pleasure Bubble

AFTER the first suspicions had worn off, the Earthmen felt that they had been singularly fortunate. To be captured by these intelligent beings had been about the most convenient thing that could happen to them. They might have found the human race entirely wiped out on the gloomy planet. Or they might have been struck by one of the still inconveniently numerous meteorites which would mean, at the very least, being marooned. Had they possessed the ability to look into the future they would not have rested quite so complacently in the hammocks assigned to them in the great patrol ship.

The big Jovian, they learned, was chief of the ship. He told them his name was Musters, and introduced his officers. They were an intelligent, efficient lot. From them the Earthmen learned something of the social organization of the human race as it survived on Jupiter.

"The race followed its natural evolution," intelligent and handsome young Lieutenant Reko explained to Sine as they leaned against a railing and gazed out of an unshuttered port at the somber splendors of Jupiter as it gradually swelled and covered the firmament.

"Like mated to like, and so the superior individuals became more superior, and the inferior ones more inferior. This resulted eventually in two races. Naturally we took steps to properly segregate the inferior race. Our efficiency experts have found ways to put them to work—to make them quite useful in fact. Of course we could not trust them with our weapons, our ships, our really important central power plants——"

What were these inferior—these so-called *Mugs*—what were they like? Reko arched aristocratic eyebrows. Why, they were often quite human in their appearance—though occupational diseases, and so forth——. Sine gained the impression that they were kept out of the way in order not to disturb the esthetic comfort of the superior race.

"There was a time when we had trouble with them," Lieutenant Reko said. "There were trouble makers among them. They attacked the homes of the First race, seized power control stations. Not fifty years ago there was an insurrection. But the Mugs lost. Thousands upon thousands of them were driven into the swamps and caves on the edge of the Tenebrian Sea. They were never seen again, although we searched for them with our heat rays. Perished, no doubt."

None were left now, Reko said, except those actually

and fully occupied at certain labors for which they were found efficient. They were allowed to reproduce in sufficient numbers to fill the requirements—no more.

"What a rotten fate!" Sine exclaimed.

"They are quite a terrible people," Reko pointed out, closing a distasteful subject.

A few sleep periods later Musters called his terrestrial guests to his cabin.

"I have a pleasant surprise for you," he told them in his musical baritone. "Our planetary conference would wish for me to give you a most pleasant impression of Jupiter, so that interplanetary relations may be resumed under the best possible conditions. For that reason I am going to land you on a satellite that I'll wager will be a revelation to you. It is the goal and object of every one of our people. But it is costly and only a small portion of our population can be accommodated at a time. You may judge the kind of place it is by the name the public has given it: 'The Pleasure Bubble.' Come to the astrogator's cabin now; I'll show it to you."

They followed Musters to a compartment in the rounded bow of the great ship, stared out of a quartz port between opened shutters.

They saw Jupiter, immense, formidable, a mass of turbulent vapors, a depressingly drab scene. Suddenly Lents exclaimed, incredulous;

"Look! A satellite! There is no satellite this close to Jupiter! It's mathematically impossible!"

Musters laughed jovially. "It's there, isn't it? That's Jupiter's tenth satellite—The Bubble. It is less than 100,000 miles from the vapor envelope and has to travel so fast that its period is less than 8 hours. It was built by the First Race and set on its orbit so that our people would have a place where they could enjoy the sun, which is never seen from Jupiter's surface."

"It *is* a bubble!" Kass remarked, after an absorbed study of the satellite. It was racing just beneath them, at a dizzy speed, like a bubble blown before the wind. The ship followed the satellite, drawing closer, so that it grew in size and beauty.

LENTS was mentally calculating the rupturing pressure exerted by the atmospheric pressure inside the crystalline ball. He stopped aghast at the thought of the tremendous strain.

"That crystalline material stands the strain easily," Musters assured them. "It will resist anything but a direct hit by a very large meteorite. As you can see now, the sphere, which is about a mile in diameter, is bi-sected by a plane surface, on which the city is built. In that little area you will see reproduced the choicest conditions of Earth." He turned earnest, hungry eyes on them:

"You don't know how lucky you people of Earth are!"

The ship was now coming quite close to the vast curve of the crystal, and they could see glimpses of beautiful structures in fairylike colorings, of small lakes like exquisite gems, of brilliant bursts of light that they conjectured served as substitutes for the sun while it was occulted by the enormous bulk of the planet.

Steadily the ship swept downward, to the level of the city, and the Earthmen became aware that the entire sphere was not transparent crystal. The part below the city level was a dull, ugly black.

"That's where the machinery is," Musters answered their questions, somewhat shortly, it seemed. "Hydrogen integrators there—to generate the power. Leakage of injurious rays down there—couldn't expect the First race to work there."

"Who *does* run the machinery?" Sine asked curiously.

"The labor Mugs, of course!" And Musters changed the subject.

The chief left them to their own devices as he superintended the lining up of the big ship's airlocks with the lock gasket of The Bubble. This effected, he bid his guests courteous farewell, assuring them that their ship would be conveyed to the Jovian capital city of Rubio, where they would be given every facility for repairing their damaged motor.

Sine was awakened by the talking of Kass and Lents as they sat at their breakfast in their unimaginably luxurious apartment. They were near the top of one of the fairylike towers they had glimpsed, and through the crystalline roof they could see the blackness of star-studded space. Far above was the glint of slanting sunlight on the outer covering of the sphere. This was the fourth morning on The Bubble, and the Earthmen were beginning to become vaguely restless. Their hosts had entertained them royally, but—

"I didn't see anything funny about the way they shoved that labor Mug out of the airlock," Lents was saying. "The poor devil! Stole a little of the juice they call ambrosia. The way that elegant over-civilized crowd laughed!"

"They lined up and watched the body floating alongside," Kass added somberly. "And that Mug was as human as you or I."

Their words recalled the scene vividly to Sine's mind. The broad, green field between two crescent lakes. The beetling-browed wretch, with eyes full of fear that darted from side to side, led to the center of the field by two splendidly armed warriors, there to be left alone in an agony of uncertainty.

He saw again the half-hundred clean-limbed athletes, sons of rich Jovian families. They were lined upon each side of the field. At the signal they dashed in. The frightened labor Mug tried to escape. As one team closed in he doubled, ran directly toward the others, saw his mistake too late. There was a brief savage scrimmage, and the unfortunate victim was stretched unconscious on the sward, while the victors and the vanquished in this curious game joined arms and made for the baths where exquisite nymphs peered coquettishly from behind delicately proportioned columns. Sine reaped uncomprehending and resentful stares when he declined to join them.

"Too rich for my blood," Sine told his companions at breakfast as they discussed their experiences. "Hope they take us to Rubio soon. We've done our job, and as for me, I'm not cut out for high society."

After they had completed their breakfast a girl came hesitatingly into their chamber. Sine stared at her curiously. She had none of the enameled beauty of the women he had seen until then, but in her young face was a subdued comeliness that was attractive after the assertive pulchritude that was universal among the young women of the First Race. Unlike the shrewd display of their chiseled perfection, this girl's slender, rounded body was wrapped in a thin, gray garment that concealed as it draped. It was caught by a cord around her waist. Her feet, smaller and more fragile than the sturdy Jovian standard, were encased in neutral buskins. She stood submissively, waiting for them to speak.

"What does that girl want?" Kass murmured aside. "My stars, she can't be a labor Mug!"

"Come here, girl!" Lents rumbled kindly. "What can we do for you?"

The girl came forward hesitatingly. Her voice was

soft, lacking the brassy assurance of other Jovian women.

"I was sent here, masters, to guide you through hell."

Immediately after this startling statement her face turned a brilliant red, then a deathly white. She half turned as if to flee, but, as if realizing the uselessness of flight, she faced them again, defiantly;

"I don't care what happens to me!" she declared desperately. "I've told the truth at least once. Jovians call this place The Pleasure Bubble, but they don't have to live in the black half. Now tell them what I have said."

"We will not tell anyone what you said, child," Lents rumbled comfortingly. "But tell us. You don't look like the Mugs we've seen so far—nor like the poor fellow we saw put through the airlock. They seemed—a different race. But you—why—on Earth we could hardly tell you from any other kid of your age."

A flash of spirit illuminated the girl's tragic, immature face.

"They call us a different race!" she exclaimed. "True—but not an inferior race! They are the inferior race, though the stronger. They depend on our knowledge, our labor, to live! My father told me so!"

KASS, who had been studying her silently, asked, "Your father?"

"Yes. The technic in charge of the machinery below. He was ordered to escort you around. But his scars from the rays make it hard for him to breathe today. He is in his bunk. So he sent me in his place."

Sine wondered if life under such unnatural and destructive conditions would some day reduce this graceful girl to a horrible parody of humanity. He asked;

"Do you work below?"

Her clear gray eyes fell on him.

"No. I was selected by the Committee to work in the Baths when I am sixteen. I am fifteen now."

"Holy twisted nebulae!" Sine swore under his breath. "The kid doesn't know what her work in the Baths is going to be! So the Committee selected her for the Baths!" He felt suddenly a violent dislike for the very rich Jovians, a feeling of fraternity with the Mugs.

"We will be very glad to have you guide us," he said formally. "What is your name?"

"Proserpina. My father said it is fitting for one who lives where we do."

Strange anachronism! That name from the mythology of Earth's youth. Like that goddess of the underworld from misty antiquity, she led them down, down, until it seemed they must be near the bottom of the black hemisphere. It was a world of dim distances, of shadows, of pipes and girders, or grisly abysses from which came mysterious sounds; of locked chambers in which ghastly fires flared.

Now and then they met the inhabitants of the place; misshapen Robolds going about unknown tasks. They stumbled suddenly out of unnoticed passages, carrying burdens, grotesque, apelike, weary. Most of them were hideously deformed.

Several times, when their journey led them into a certain part of the hemisphere where they felt strange tingling of their nerves, the girl led them away.

"We must not go there," she told them. "The integrators are there. There my father received the scars of his chest that keep him from breathing. Most of those who are blind worked there."

The Earthmen had already heard hints of the atomic integrators from which the Jovians obtained endless power. They had no desire to get too near those searing by-products of power.

"Do you mean to say," Lents asked, puffing a little from their exertions, "that people down here live here all their lives?"

"I will show you our home," Proserpina said simply.

They came to it presently. A niche, a metal-laced nook, deep in the hull. Gigantic girders formed one side of it. On the other side enormous air conduits. It was clean, bare, not as depressing as they had expected. It was more like a gallery, long and narrow, sparsely furnished.

Something rolled out of a bunk at the farther end. Something like a great spider. A man, stooped over, his once powerful body doubled, so that his knuckles almost dragged on the floor-plates. He came toward them, fierce gray eyes looking out at them under bushy brows. So formidable that Sine's muscles tensed.

"Are these the visitors, Proserpina?" His voice was husky, as though his constricted chest with difficulty performed its function. He looked at them intensely.

"They tell me you are from Earth. Are you with us or against us?"

"Father, be careful!" She put her hand over his mouth, to be shaken off impatiently. But the girl's warning had taken effect. The man—it was impossible to tell if he were old or young—looked at them broodingly.

"My mother died here," Proserpina said. "And I am afraid he will. His mind is not as clear—"

Lents, distressed to the bottom of his generous soul, helped the victim of the Jovian pleasure moon back to his bunk. "This girl," he muttered to Kass, "can't we get her out of here?"

He had not meant for her to hear, but her quick ears caught his words, and a ray of hope illuminated her features. She was standing beside Sine, and her thin fingers gripped his hard bronzed arm;

"Oh, could you take me away? I will be your slave!"

Sine gently disengaged her fingers. He was strangely embarrassed.

"I'd like to. But I'm a bachelor man. No place for you, you know."

She did not persist. No doubt she realized that she could not leave that gaunt parody of a man who was her father.

When they bid farewell to Proserpina they were steeped in profound depression. Alone in their room, they talked over what they had seen, but they could think of no way to save Proserpina from her fate. They were still discussing their visit when the manager of this satellite of delights called on them and informed them that Governor Nikkia of Jupiter awaited them in the capital city, Rubio. A space ferry was even then clamped to the locks to take them to the mother planet.

CHAPTER III

The Coming of the Teardrops

GOVERNOR Nikkia was like the majority of the First Race. Although he was not large of stature, his powerful muscles bulged impressively under his clothing. The two relatively slender Earthmen, naked save for their trunks, looked almost ridiculously puny. Lents' portly figure was more impressive, but the big scientist had all he could do to carry his weight, so uncomfortably augmented by Jupiter's great mass. The unaccustomed thickness of the atmosphere, too, made the Earthmen uncomfortable. The heat was excessive, for although the outer cloud masses had been determined by photometric telescopic examination to be near the freezing point of hydrogen, Jupiter's enormous store of internal heat made its surface

temperature average around 100 degrees Fahrenheit. The humidity was high, and the explorers from Earth were distressed.

Nikkia was a good host, however. He ordered out one of the government cars, luxurious conveyances supported by gravity repulsion buttons, and personally accompanied his guests on a tour of inspection through the murky fog. They rode interminably over wet, domed roofs, down through gloomy arcades. Thunder rumbled incessantly, and occasionally there came a lurid glow of lightning.

For a city of Rubio's extent, they saw very few people. Occasionally they saw the erect, confident figure of a member of the First Race, tending some mighty engine whose purpose they could only guess. The inhabitants preferred to stay indoors, if they could not afford to dally in The Pleasure Bubble.

Nikkia listened with interest to the voyagers' account of their journey through space. But he did not respond with much enthusiasm to the suggestion that interplanetary commerce be resumed.

"We are comforable," he said good-naturedly. "Besides, I'm not sure that the Mugs could build ships suitable for such long trips. They're getting lazier every day!" He shook his head regretfully.

"What do you expect?" Sine blurted. "You treat them like slaves, ruin their lives, and then you're surprised because they lack ambition!"

Nikkia looked at him in mild astonishment. "But they have to be kept in their place! If we gave them free hand they'd soon run us out. Why, not fifty years ago——"

He told again of that uprising that had resulted in the breaking of the Second Race's pretension. "We have to control 'em," he ended smugly.

The Earthmen were baffled by the bland indifference of the Jovians to their mother planet. They met many of the First Race in the next few days, but none seemed interested but the so-called Mugs, the Second Race, and their interest was wistful akin to nostalgia.

But the three scientists were to learn that the First Race were good fighting men, regardless of their shortcomings in other lines.

* * *

The glowing "teardrops" appeared a little over a week later. They were so called because of their shape, but the Jovians knew as little about their nature as did their guests. They appeared early one murky morning, as Kass, Sine and Lents sat at breakfast with Governor Nikkia. The servants, comely, characterless specimens of the Second Race who held themselves snobbishly above their fellows, came panic-stricken;

"Your Supremacy!" called one, making a low obeisance. "There are strange lights hanging over the palace!"

Nikkia brushed the slight fellow aside, dashed up a stairway to a terrace on the roof, closely followed by his guests. In a few moments they were all soaked by the warm downpour as they stood on the terrace, like an island in a sea of brown fog.

There were three of them, roughly egg-shaped, but with an elongated tail. More like tadpoles, save that the tail was rigid and emitted a fiery streak. Obviously they were propelled by a new adaptation of the old rocket principle. They swam back and forth slowly, as if questing for something, leisurely selecting their victims. The strangest thing about them, however, was the light. A brilliant red, almost pink, like the glow of a neon tube, it penetrated the fog. Its pulsations even penetrated brain and body, so that the watchers became unpleasantly conscious of it.

Nikkia, watching tensely, turned suddenly on his guests;

"Damned funny! Barely you show up, and now this! I don't like it. Are they from the Earth?"

Lents swelled in slow and ponderous anger.

"Do you think, sir, that we are of the sort to abuse your hospitality by spying on you? We don't know any more about those things than you do!"

"Damned funny!" Nikkia repeated to himself. "Wonder if there's any of *them* left?"

"Your Supremacy!" a servant interrupted. "Call from the war office!" He was carrying a drum-like contrivance, carried on a stand, and set it down in front of the governor.

"Well?" Nikkia snapped impatiently.

The screen which formed the drumhead glowed into life. A Jovian officer, looking exceedingly efficient and warlike in his armor uniform, stood at salute, which Nikkia returned impatiently.

"Who are those flyers, Sonta?" the governor snapped.

"I don't know, Your Supremacy," the officer growled. "They fail to answer our challenge, and none of the men have seen anything like them."

"Then why don't you turn the heat on them?"

"We have. Our heat-rays have no effect on them. That pinkish light is a reflector wave of some sort. Several of our beam projectors were burnt up by the kick-back."

"Ram 'em then! Ram 'em! Sacred Ganymede! Is our Defense Service degenerating into a crew of Mugs?"

THE officer's image on the screen was seen to flush, to draw itself up resentfully.

"We have sent ships up to ram them, Your Supremacy. Three of them have been destroyed."

"I was watching. I saw nothing."

"The visibility is worse than usual. They are half a mile high. Our own ships are invisible at a hundred yards. It's that cursed light."

Nikkia shut him off peremptorily.

"Never mind the conversation, Sonta. Get out every available defense craft. Box those teardrops. Ram them. Destroy them—I don't care how!"

The screen was suddenly dark, and Nikkia gazed angrily up at the mysterious glowing craft overhead. So far they had done no damage except to the city's fighting ships.

"Listen!" Sine exclaimed. His body glistened like wet bronze as he stood in the half darkness and strained to catch some sound over the steady patter of rain. "Lents, quit puffing!"

From high overhead, some sounds were coming to them. A steady, droning rush, like the sustained exhaust of rockets. That must be from the visitors, for the official ships were equipped with the gravity buttons. Now and again one of the glowing teardrops would be thrown violently from its course, evidently the effect of impingement of the gravity beam. But not one was disabled. The defense ships were not faring so well. Every little while there would be a fog-muffled crash as one of them crashed, throwing a stone roof into the street. But none fell near the governor's palace.

It was uncanny. No sound save that low, sibilant roar, and an occasional crash out there somewhere in the darkness. The mysterious attacking ships so plainly visible and so immune, and the defensive fighting craft, flying in silence and invisibility—crashing anonymously.

Nikkia had dropped his air of assurance and calm

superiority. He was frankly worried, and still a little suspicious of his guests. This attack—it did seem rather a coincidence. What would Sonta have to report now?

He twisted a dial on the side of the communication drum. A junior officer appeared on the screen.

"What the devil?" the governor exploded. "Where is Sonta? I'll have him broken for this! Lieutenant, call Colonel Sonta at once!"

"Your Supremacy," the lieutenant said respectfully, "Colonel Sonta went up in one of the guard ships, and it has been reported crashed south of the catalyst plants."

For a second Nikkia stared at the screen, then snapped the switch wordlessly.

The attackers seemed to have broken down the capital's defenses. Here and there, through the thick, greasy fog, a lurid red glow would take life. That was the fog-diffused reflection of a heat-beam, probing the sky for the "teardrops." After a little while the glow would flare up and as suddenly die down, followed by utter blackness. Another heat-beam out of commission.

Nikkia was frantically polling all of the city's defense commanders. They reported failure with monotonous regularity. The electronic barrage wall around the city had been passed easily—the equipment wrecked. A proton bombardment had yielded exactly nothing—He snapped the switch, peered eagerly at the mist curtain overhead—there was a series of heavy concussions. The glowing visitors were being bombarded from above. The screen glowed again . . .

". . . but the bombs are all detonated long before they get in effective range of . . ."

Close by a vague shape—a darker shadow in the muggy air, suddenly materialized. It was falling swiftly—a familiar cylindrical shape with rounded ends—one of the Jovian guard ships. It struck scarcely a hundred yards from the palace—struck with a jarring burst of sound like rending metal. Then utter silence again, and darkness. No cry of wounded man. No man could survive that fall and live.

"Some kind of emanation—shields them from all known attack—" Nikkia swore monotonously and regularly.

The glowing ships now settled down to the real purpose of their attack. They began to course back and forth across the city, methodically. Like burning meteors they disappeared over the horizon, to the city's farthest suburbs, back again, as if over a measured and marked course.

And like burning, melting meteorites, they shed trails of sparks, blazing liquid. Wherever these fiery drops landed there ensued immediately a dry crackling, followed by the rattle of falling masonry. As none of the buildings were inflammable, there was no danger of fire. But wherever this incendiary trail fell, stone cracked and crumbled.

"They are destroying us! Forty million people live here in Rubio. They will kill us all, women and children too!"

"*Who are they?*" Sine asked suddenly.

NIKKIA looked at him bleakly. "Who? Why, the Mugs, of course! Those we banished. Those we thought we wiped out."

"Oh, yeh." Sine's intonation was very dry. "They're giving you a dose of your own medicine."

Nikkia did not reply. As if he apprehended, too late, that his statement might have sounded like a plea for help, he shrugged his massive shoulders with elaborate indifference, saying;

"I and my wives are not afraid to die!"

The Earthmen could no longer watch this ruthless destruction, however, regardless of the provocation.

"You say that pink light is a protection against every *known* mode of attack?" Sine asked, turning sharply to the governor.

"Yes. And that's sufficient, isn't it?"

"Is it proof against *this?*" Sine jerked the little tube out of its clip, directed it against a stone parapet that loomed grotesquely through the fog. A brilliant white beam leaped forth, cutting the fog like a bar of platinum. Then there was darkness, and the governor, examining the parapet, noted with growing hope that a stone pillar, a foot in diameter, had been cut off smoothly, cleanly.

"The disintegrating ray!" he murmured. "I have read of that, in fiction. But here! Here it is!"

Suddenly he was all energy.

"Will you use this weapon against our enemies? I assure you that you will be well rewarded. As much eka-iodine as your ship will carry! My own ship is here, in the courtyard. It is swift, and powerful. You have already learned the controls. Take it. Bring down those murderers!"

The fiery meteor was coming toward them again, planting a swath of death a hundred yards wide. There was really only one answer possible. The terrestrial scientists, having come on a mission of peace and discovery, stepped forward in unison.

"Give me the activator key!" Sine said crisply. "Lents, will you see that the port gaskets are loose? Kass, I'd like to have you take the controls."

"Right! Right!" They ran past the governor of the greatest planet in the solar system, ignoring him, down the broad stairs, through halls of weighty magnificence, and into the rain-sluiced courtyard.

The governor's ship was waiting there. Not very large, but fine. Its polished metal gleamed richly.

"Quick, inside!" Sine threw open the manport valves. They were inside. The gravity buttons glowed with their peculiarly material lavender light, and the ship rose vertically with swift acceleration.

From the sky the death trails left by the invaders were clearly visible through the murk which obscured everything else—a pink, pulsating light. And the three glowing vessels were coming toward them.

"Get above them, Kass!" Sine commanded. "When they pass under I'll let them have it."

Closer and closer they came, those blobs of light. The Earthmen could see nothing but the light—get no hint of their construction. But that there were men inside they never doubted. The glowing ships seemed to swell, to expand monstrously, and their throbbing emanations became more furious. They seemed to hesitate as they were about to pass beneath.

"They see us?" Lents rumbled, pulling at his toga nervously. The cloth was soaked, clinging to his fat body.

"Close enough!" Sine decided, leaning out of a port, disintegrator ray tube in his hand.

At that instant the strange pink light seemed to encompass the whole planet. They were bathed in it. The fog was a sea of baleful pink. Sine stiffened into impotent rigidity. The ray tube fell from his numbed fingers. He felt himself floating, weightless, in a sea of red that smothered him deliciously. And swiftly even that consciousness was succeeded by black oblivion.

CHAPTER IV
The Monstrosities

"HE'S COMING out of it. Hand me the water, Lents."

Sine awoke to see Kass bending over him. He felt weak and languid, and the memory of recent events was returning only slowly. He looked around, saw that he was lying in a chamber about fifteen feet square, evidently hewn out of solid rock.

"Are you all right, Sine? Answer me, boy!" Kass' bald head gleamed in the yellowish light of a single emanation tablet on the ceiling.

"I'm all right. Where are we?"

"Under the sea. Some hidden city of the Second Race—those that were banished. We are prisoners, but honored prisoners it seems."

Sine passed his hand over his eyes.

"How did we get here?"

"Some kind of emanation of theirs—the brightening of that light, I guess. It had a paralyzing effect. I know I froze where I stood, unable to move a step. And I was protected by the hull. Same with Lents. But you had your head out of the port—caught the full effect. It laid you out cold."

"They boarded us then," the fat man supplied.

"As easy as that! Simply boarded us, herded me and Lents into their own ship, which is just as suitable for navigating in water as in air. As for you, they had to carry you."

"Better tell him what to expect," Lents suggested.

Kass explained, with considerable scientific interest:

"The First Race was not so far wrong in calling them 'terrible people.' They are, a race of monstrosities. Men with four or six arms, men with hair like fur all over their bodies. With heads ten times too large. With boneless tentacles instead of limbs. With scales instead of skin. Quite horrible. And yet, most of them are highly intelligent, with normal human emotions, and painfully conscious of their deformities."

"I don't quite understand." Sine was flexing his muscles, sitting up with the support of one elbow. He saw he was lying on a pallet of dried sea weed. "What caused these abnormalities?"

"Well, you know—" Lents was speaking judiciously. "You know all about the mutations produced by X-rays in the biological laboratories?"

"Of course!" For approximately a million years these actions of X-rays had been understood—their ability to bring about extraordinary mutations in the life-germ, whether animal or vegetable—the acceleration of natural evolution a millionfold. "But you don't mean to say the First Race deliberately brought about these mutations in the Mugs?"

"Not deliberately. But they permitted it with utter callousness. You know those hydrogen integrators we saw at a distance in the dark half of The Bubble. Those things are the source of most of the power used by the Jovians. But the generators have a mighty dangerous by-product—the cosmic ray series, for instance, a particularly destructive band below the X-ray spectrum too."

Sine nodded comprehension, his eyes hardening as he thought of the grotesque, distorted wreck of humanity who was Proserpina's father. A mere whim of fortune that he had not been condemned to that hell before she was born, or she might have been one of those unfortunate mutations—

Might yet become one! Not only could the rays deform the offspring. They could distort the full-grown, normal body. Sine felt increasingly dismayed as he thought of this immature, quiet-eyed girl, this waif of an alien world. He experienced a recurrence of the indignation he had previously felt. This selfish, superior First Race! Condemning the weaker people to torture and death so they could enjoy a little paradise! The Pleasure Bubble they called it. Sphere of the Damned was better! For the unfortunate consigned to the dark hemisphere was condemned to an inferno that surpassed the Ancient's most perfervid imagination.

"I wish we could save Proserpina!"

The words were out before Sine knew it. Kass stopped in the middle of a sentence and lifted a quizzical eyebrow.

"Oh, get the romantic ideas out of your heads!" Sine snapped. "You know she's just a kid. I couldn't take care of her if we did take her back to Earth. But I'd like to take her out of The Bubble!"

Lents pulled at his toga thoughtfully. It was dirty, still wet, and smelled not too pleasantly.

"I could take care of her," he said slowly, and his deep bass voice was a little wistful. "My wife would be glad—we're getting old, and no children—"

"We-ell," Kass submitted practically. "I'd like to take her away, and her poor old daddy too—or is he old? But what's the use of discussing all that? Here we are prisoners, and she's a prisoner of the First Race, and we shall never see her again. Or the good old Earth either," he added sadly.

A man entered the room. He looked more like a normal man than might have been expected—only his exaggerated dish-face, his bulbous forehead proclaiming him just another victim of the First Race's industries. Or his shrill, treble voice as he announced:

"Gentlemen of Earth, the Manager and his council expect you in the office. Follow me." He turned, waited for them to come.

The Manager's messenger led them up a long, ascending tunnel meagerly lighted at intervals by small emanation tablets. After they had gone perhaps a hundred yards the hewn rock gave way to what was evidently a kind of concrete.

"This part of their city is built above the ocean floor," Kass remarked quietly. "They brought us in through airlocks. Passages lead to caves along the shore where the original refugees holed up. These are mostly their children, so marked and deformed even in embryo."

Their dish-faced guide now stepped aside as they entered a spacious chamber with a domed ceiling. Here and there it was wet. No doubt above there was the sea. Lents made a rapid mental calculation, rumbled into Sine's ear:

"Can't be so deep. Not over a hundred feet; maybe less. Otherwise those arches couldn't carry the weight."

A HUSH fell upon the room. The leader of this strange people—the one they called The Manager, was rising from his seat back of a desk. His head was very large, his eyes large, liquid and expressive. A total lack of eyebrows, of hair on his head, gave a mixture of the comical and the obscene to his appearance. But the respect with which his counselors, ranged on either side of him, regarded him, ignored his appearance. They were all, without exception, victims of the strange and terrible mutations of type induced by the First Race's callous disregard to the dangers of the rays. All wore loose garments of drab material which concealed their deformities to some extent.

The Manager's large, intense eyes fastened on the Earthmen, and he addressed them:

"Men of Earth: We have captured you in battle, but

we would be friends with the Old World. Why did you try to fight us?"

"You were murdering helpless victims," Sine said shortly. "It was not our fight, but we could not stand by and permit such a thing."

Something like amusement flashed up in The Manager's enormous eyes, so old, weary and wise.

"So you could not bear to think of an easy death for those of the First Race? What think you of their treatment of us?" He raised a scrawny arm—so thin it suggested a skeleton. "Hunted like beasts—imprisoned and tortured! Are we not human?"

"You see," Kass interposed diplomatically—"we were their guests. And in a way their quarrel . . ."

The Manager cut him short peremptorily:

"You were their guests! You lolled with them in The Pleasure Bubble, in the beautiful sun! The sun that most of us have never seen! And down in the dark half-human beings like yourselves—toiled and slaved at those devilish integrators to keep the machinery of pleasure going.

"You were the guests in the Governor's palace—in the magnificent city of Rubio, though to you it may seem dismal. But did you think of the poor slaves, deep underground, in the slimy sewers, in the uranium pits, in the power plants? You basked in luxury with the First Race, and their fight was your fight—their enemies . . ."

He was working himself into a fury, evidently forgetting the original purpose of this conference with the prisoners. But one of the counselors now approached him, bowed respectfully so that his scaly face was hidden. The Manager cut short his tirade.

"What is it, Gnom?"

"Isn't The Manager digressing?" Gnom asked in a hollow voice. "These men of Earth are now our guests. They come at an opportune time—when we shall reap the fruits of our long planning. If we wrest power from the First Race, shall we not need the friendship of the Mother Planet? Let them, then, carry our story to Earth, if it be that we may need their help."

The Manager stood in thought. At last, coming to a decision, he asked sharply:

"With whom do you stand, men of Earth? With us or our oppressors?"

Kass and Lents looked at one another blankly. They started as Sine spoke up sonorously, beside them:

"Officially, we are supposed to be neutral. But if you attack The Bubble and rescue the poor devils in the dark hemisphere I'll help!"

But The Manager shook his enormous head slightly.

"That we can not do. That satellite is too far out in space. There is no concealment, and we can not yet fight their patrol ships in space."

"Listen!" Sine persisted. "There is a man there I know. He's about ready to die, unless he gets away. And he has a girl, a kid of fourteen or fifteen. The rays haven't made a freak out of her yet. I want to save her. Give me a ship and I'll take her out myself!"

"That we can not do. Individuals do not count. One, or a hundred, may die. We can not endanger our plan."

The counselors had drawn a little away from the Earthmen, unconsciously symbolizing their support to The Manager. Again he raised his bony arm.

"Up above there our ships are destroying every city of the First Race on the planet. Our power-beams for the glowing ships are encircling Jupiter in a network of red and death—death to the oppressors! The Pleasure Bubble's turn will come. And when it is dashed down, master and slave must die together. To save the slaves might let some of the masters escape."

"Gentlemen!" Kass was trying to smooth over the situation, "We have been sent here on a voyage of discovery, not of war. We regret your troubles here—but we can take no part in them. Our attitude is friendly to . . ."

"No! Damned if I will!" Sine shouldered his iron-hard body through the close-packed counselors, so that he stood directly before The Manager, who did not shrink from the formidable young man. "If you murder those poor Mugs in the black hemisphere, I'm your enemy from now on!"

"And I!" The words boomed and reverberated in the vaulted chamber, and Lents moved his bulky body beside Sine.

"And I too!" Kass' naked, skinny torso glistened with sweat. "The First Race may be murderers, but they're magnificent murderers. They wouldn't forget their friends!"

The Manager's large, liquid eyes seemed suddenly filmed over. He jerked his enormous head sharply, snapped:

"We waste time. Put these meddlers out through the locks, that they may feed the fish."

BUT Gnom again interposed.

"If The Manager will permit—there is much water on Earth. They may know how to swim—might go to the top and escape—"

"True, Gnom. I have a truly great brain, as all the oppressed admit, but details escape me. Call one of the watch, put them to death first."

Gnom turned, looked into one of the larger passages that centered on that room. He turned his blank, scaly face.

"The watch is not here!"

"Perhaps he was called. See!"

But before Gnom could execute the order a commotion arose in the passage. A voice called from outside:

"Officer of the hour prays audience with The Manager."

"Enter."

An officer with an extreme hunchback dashed in, bowed low before The Manager.

"It is the end!" he gasped. "They watched our glowing ships plunge under the water, and they are setting bombing rockets for this area. The first ranging shots have already been fired. Listen!"

After a few moments there came a dull thud, as though a blow had been struck against the ceiling. A pendent drop of water fell. The Manager's hairless face became bleak.

"I made great plans, great inventions—forgot a simple detail!" He slumped as he stood, a mixture of the absurd and the tragic. The mutation that had made a brilliant mind had nevertheless left it incomplete, and none had realized it until in this extremity. Again came that dull shock, and this time it seemed a little stronger.

The Manager shook off his apathy. His great eyes burned with livid fire, as he called:

"Officer of the watch. Take these prisoners to the locks. Kill them and put them out."

"I obey!" The officer, squat, with enormous torso, pointed a small wand, pointed with a tiny spot of that peculiar pulsating pink light, threateningly. Stolidly he herded them through a broad corridor. Now and then they passed inhabitants of this submarine city, nightmarish, pitiable creatures, now disturbed, dreading

death. Sine wondered vaguely that they should cling to such an unhappy existence.

He was recalled to their own predicament when a metal gate, closed by a screw-wheel, loomed up in the poor light. The inside lock! The guard motioned them ahead, stood between them and the passage. He fumbled at his belt, ignoring the dull hammerblows of explosions transmitted by the water. He seized Kass by the throat, prepared to plunge the knife into his body.

Sine leaped past, crooked his arm around the man's thick neck, attempted to break his neck. But a giant arm threw him off easily. He fell to the floor. Like an echo came the concussion of another explosion.

The guard, without trace of ill-humor, turned his attention to Sine. He pointed the little wand at him, and the light glowed brighter. Sine felt again that torturing paralysis. His senses were leaving him. The pink light was throbbing, expanding . . .

He wondered why the stones of the passage should be pushing in, spurting water. The pink light faded. Tepid water struck him, stinging like needles. There was a roaring, blackness. A fat arm hooked around his waist—Lents', no doubt. He felt himself borne along in a swirl of water, strangling, fighting blindly. There was another terrific explosion shock, an interminable climbing struggle. Then his head broke water and he breathed air again. Lents came up beside him, puffing and blowing, and after a long wait—so long that they despaired, Kass came weakly to the surface.

CHAPTER V

The Struggle for Freedom

THEY were afloat, and comparatively safe from the rockets which shrieked out of the leaden sky and threw spectral waterspouts up into the fog before they exploded. Unless one exploded directly under them, or very near, they would be safe—for the time being.

"Which way is shore?" Lents puffed.

"Rockets seem to come from that way," Sine answered, flipping his hand. "Swim that way. Fish probably lost appetites, so won't bother us."

The bombardment had indeed frightened away the monsters of the deep, and even the dead in the ruined submarine city would rest in peace for a while. But the Earthmen, after several hours of swimming, doubted that this was more than a postponement of death. The long greasy swells were rising, presaging another of Jupiter's unimaginably violent storms.

"I see a light!" Sine strained his eyes to get another glimpse of it through the brown fog. "There it is again." Something was moving slowly through the air a short distance over the water, following the course of the rockets, which had ceased coming. A powerful searchlight was cutting through the murk. A war party of the First Race, looking for wreckage.

In their methodical search they soon found the swimming men, and they were helped into the chief's cabin. Sine, looking up with half-blinded eyes, saw Governor Nikkia sitting in his chair, looking at him coldly.

"So!" the governor bit off his words. "The traitors are fished out." His arrogant, handsome face was vindictive, uncompromising. "We forgot that the aborigines of Earth would naturally sympathize with their equals, the Mugs! That was nicely timed, your 'visit.' How long have you been in communication with the rebels?"

The Earthmen, weak and exhausted by their long exposure, resisted their desire to lie down on the floor. They stood before the governor, hemmed in by hostile fighting men, and tried to maintain the traditions and dignity of their planet.

"We were not in communication with your slaves," Sine declared. "You should know that. Your radio monitors would have picked up any messages, and your own patrol ships picked us up when we were far out in space. Our mission is one of peace. As for your quarrels, they do not concern us. We are strictly neutral."

Nikkia laughed, a short, clipped bark in which there was little amusement.

"Well, your guilt is a matter of small moment anyway. We have paid the Mugs for the damage they did, and they will not have another chance. And if they had an idea of getting help from Earth, you shall be an object lesson on the uselessness of such hopes."

"Meaning?" But Sine and his companions knew that the meaning must be evil.

"Meaning," Nikkia snapped, "that from now on you three are Mugs, no better and no worse than the Jovian Mugs. Except that I shall instruct the labor office to put you to work at one of the power integrators—perhaps in The Bubble. We don't want to waste you" he added with grim humor—"and the gravity here on Jupiter might reduce your life of usefulness."

The governor turned his back in dismissal, and the prisoners were hustled into a dark, extremely hot storage hold. Here they lay down amid an untidy collection of miscellaneous gear, thick with dust. They rested gratefully until some of their strength should return to them.

When they awoke from their sleep of exhaustion they were aware that the ship had landed, and a few minutes later the door of their prison was opened and an officer, heat pistol trained on them, commanded the prisoners to get into another ship for transfer to the metal and crystal satellite where they were condemned to drag out the rest of their lives as slaves.

The second coming of the Earthmen to The Bubble was in marked contrast to their first. Instead of the large, commodious lock in the upper hemisphere, they entered this time through a drab, dull orifice in the black half of the sphere. The patrol ship which brought them was contacted without ceremony. They were thrust though with curt orders to ask somebody for the Mug superintendent's office. Then the valve closed behind them. There was a grating sound as it was locked from the outside, and then silence. The ship was gone. They were marooned in the gloom, the grisly domain of the rays and the Mugs. Sentenced for life, with their only companions, a few broken, despairing men.

The corridor in which they found themselves sloped gently downward, and artificial gravity made it possible to walk naturally. Sine taking the lead, they passed into the depths. Everywhere were monstrous shadows, with occasional stabbing eerie beams of light. But it seemed that an ominous hush hung over this metal-interlaced gulf. Here there was no sense of motion—no sense of bubble-like lightness. It was like a descent into the nether regions of the ancient—into an inferno. But of the denizens of this dismal place there was no trace.

"Let's go to Proserpina's home," Sine suggested. "I'm anxious to see if she's still all right. And the old man too."

Accordingly they watched for the numbered corridor, and after some fruitless wandering, came again to the deep crack that was the only home this timid girl knew. She started up in terror as the Earthmen came into view. Not unnaturally, for they were all

bristly with unshaven beards and grimy with the dust they had collected when prisoners in the Jovian ship's hold.

But after her first reaction of terror she gave a glad cry, and running up to Sine, threw her thin arms around his muscular neck.

"Now listen, kid!" The young scientist began with unwonted embarrassment. But the girl clung to him, and he could not quite bring himself to tear her arms away. She released him herself, in a few moments, became suddenly shy.

Lents laughed with genuine amusement.

"Don't be silly, Sine. She's just glad to see us again. Poor kid was lonesome. Come here, Prosie."

SHE went to him, gravely embraced him; then Kass. They noticed she was trembling.

"What's the matter?" Kass asked. "You act as if you're glad to see us, but wished we hadn't come."

"Why are you here?" she asked with a troubled frown.

The Earthmen told her of what had transpired—that they were now condemned for life to serve in the dark hemisphere. As they spoke her fears seemed to vanish. She became radiant with delight.

"Then you have come at the right time!" she cried. "Our slavery is at an end, and you shall pilot us back to the Mother planet!"

"You're not crazy, are you kid?" Sine asked, lifting her little pointed chin with his hand.

"No!" she laughed delightfully. "Not crazy!" And she would have embraced Sine again. "My father has been building a ship for the past two years, hoping to escape to Ganymede, or some other moon of Jupiter. But now we shall go to Earth!" She clapped her hands excitedly.

"Listen! Let's get this straight," Lents demanded. "You say your dad has built a ship. Where is it?"

"Way down in the bottom of the hemisphere. That's where all the Mugs are, working on it when they have time. Dad's chest feels better again."

"They have built a ship, huh?" Sine was trying to suppress the hope that flamed up madly. "How'll they get it out?"

"They've made an airlock, so that when we leave the escaping air won't give us away."

It was one of these things that seem too good to be true. But when the Earthmen accompanied the girl to the secret workshop, directly next to the sphere's outer skin, they found she had spoken the truth in every respect. The men there, nearly all pathetic wrecks of the First Race's system, were at first a little doubtful about admitting the Earthmen, but one after another they were won over to the idea of seeking sanctuary on Earth rather than on some satellite of Jupiter where they would never be entirely safe. Besides, the Earthmen, though they had been stripped of all their weapons, represented additional fighting strength.

They made their final preparations with mixed feelings. Many of the Mugs had relatives on Jupiter, though few had wives or children. Even women of the Second Race had no desire to share the fate of a man condemned to a lifetime in the black half of the Bubble. Those few women who had accompanied their men to the metal satellite would, of course, be taken along, for the escape ship was commodious.

The next two weeks were filled with arduous labor, but at last the ship was ready, and observation through a small port which had been installed, showed that they were about to enter the shadow of Jupiter. Under cover of darkness they would leave the airlock. They would accelerate past The Bubble. Centrifugal force would send them away from Jupiter. At the same time their velocity with relation to the sun would be diminished. Lents plotted a long, graceful curve that would bring them to Earth with the best possible speed.

Proserpina's father lay on the floor, peering out through the port.

"Remember, Jan," Lents reminded him, "as soon as we cut the shadow, you give the order." They were all in the ship save the Earthmen and Jan, lying on the floor like a great spider, with his tremendous chest laboring painfully.

"In a moment now," Jan said. "The sun is nearing the limb."

"Open! Open, you aberrated spores!" The command came but faintly through the inside valve of the emergency airlock.

"They've found out!" Kass gasped. "Quick, never mind the shadow!"

Jan had already leaped to the long cylindrical hull, the product of endless labor and sacrifice.

"Inside!" Sine shouted. Kass and Sine made for the ship's manports. "I'll take care of the thermite."

In his hand he carried a small heat pistol that had long ago been stolen and hidden by a Mug. Quickly he made a circuit of the room, which was like an enormous sheet-metal blister on the inside of the metal satellite. After the thermite had cut out the ship free, that blister would prevent the escape of air, saving the lives of thousands of the First Race and also preventing discovery of their escape for a time.

The thermite was piled generously in a ridge all the way around. Sine leaped inside the first valve of the manport, colliding with a soft body.

"Get inside, kid!" He leveled his pistol at the thermite ridge where it was nearest to him. High time too. The walls of the blister were radiating heat. The fools were turning their infra-red beams on it!

"Lock!" Sine shouted, pressing the trigger and jumping back.

Instantly the ship was surrounded by an oval of brilliant orange and white fire. The valve clicked shut in Sine's face, and he dived through the second one into the interior, tripping the lock of that one also.

Through the ports nothing was to be seen now save fire. They were in an inferno of brilliant light and heat. But through the glare and smoke Sine saw a white-hot spot suddenly appear on the blister wall. The Jovians were melting their way through! The metal plates sagged like wet paper, dropped limply. Back of the hole, luridly illuminated, stood the foremost of a detachment of fighting men, eager to leap to the fray, waiting only for the metal to cool a little.

But the thermite had been burning steadily, biting through the tough skin of the metal moon. Just as the fugitives were beginning to wonder whether they would be incinerated in their self-made prison there was a lurch. Through the hull of their own vessel they could hear the tearing of metal as the weakened plates were sheared away. They found themselves in space, with the great ball of the Pleasure Bubble floating away from them. Just outside of the gaping hole in the sphere floated the bodies of twenty or thirty men, blown out by the escaping air.

The air was escaping in a prodigious geyser; unimpeded by an atmosphere, it spewed out, visible like a cloud due to its moisture, smooth like an inflating balloon without billows. The ball of vapor expanded swiftly toward the gray vastness of Jupiter 100,000 miles below, enveloping the fugitive ship for a time, then passing on, like an enormous milky white cloud,

falling swiftly until it was lost in the darkness, still expanding.

Overhead The Bubble continued serenely on its course, the sweeping curve of its crystal hemisphere visible. But now the actinic lights that had served as artificial suns were dark. The great man-made paradise was as cold and dead as the Earth's moon. Death stalked its pleasure palaces. Already up there the pleasant rippling lakes must be skimmed over with ice, the luxuriant vegetation stiff, crackling with frost.

Despite the selfishness, the cruelty, the utter callousness of the First Race, Sine felt a pang of regret over the destruction of so much beauty.

A messenger from the astrogator's cabin, a man whose skin was seared and scorched so that it looked like an alligator's hide, touched Lents' arm.

"Jan would like to have you verify the course." There was apprehension in the man's voice. Member of a race so long enslaved, restrained, he feared the freedom of open space.

They swept slowly past The Bubble, gaining speed. Suddenly there was a cry from the stern look-out:

"The ship's heating. Stop it! Something's wrong."

Sine, rushing to answer the call, found that the ship was indeed heating up. Shielded from the sun's rays as they were, this was inexplicable. And then he saw the dull red pinpoint of light.

He had not seen it before, that patrol ship, clinging like a leech to the airlock of the crystal hemisphere. There had been men in there when the air escaped. They had been saved from death by the closing of their automatic airlocks.

"Better get back into the shelter of The Bubble," he told Jan after a hurried trip to the astrogator's cabin. The spider man turned the vessel, and they scurried back to shelter. Although the patrol ship tried its gravity buttons on them, the Mugs had fully equipped their own vessel with similar, and larger buttons which were occasionally used in regulating the metal satellite's orbit. They could neutralize the other vessel's gravity force with ease.

"And yet," Sine admitted to the serious little group in the cabin, as they once more floated in space under the immense sphere, "they seem to have us stymied."

"Suppose they follow us around here?" Kass asked somewhat nervously.

"I don't think they can," Sine said. "I noticed when we came to The Bubble first, the ships are locked to the gaskets from inside the sphere. The men inside the ship can not unlock their ship unless they open the emergency air curtain. If they did their air would all escape through the sphere. They could do it, of course, if they put on space suits. But that procedure would take an hour, and in the mean time we could get out of range of their heat rays. So we have them stymied too. Except for one thing——"

"Of course," Lents grunted. "We can't get at them, and they can't get at us, but in a few hours we'll be in sunlight again, and some patrol will pick us up."

The Mugs, watching fearfully from beyond the doorway, turned aside. Were they, after a mere glimpse of freedom, to be immediately returned to the bondage which had become unbearable to them? Sine felt a small, thin hand slip into his. He looked down into the wistful face of Proserpina looking up at him with hope, with confidence. All at once his shyness vanished as he realized that Proserpina's obvious adoration for him was only the admiration of a child for a very big and very wonderful brother. At the same time his desire to do something to release them all from their peril was intensified by the imperatively felt need to justify her confidence in him. An idea came.

"Jan," he asked. "What is the energy output—the total capacity—of our gravity buttons?"

Jan named an approximate figure in ergs.

"Lents, if you've ever calculated to a purpose, calculate now! How much energy is represented by the mass of that sphere at its orbital velocity?"

"I get you!" The fat scientist puffed out his cheeks with excitement. "Have to estimate the mass first." He picked up a stylus from the astrogator's table, worked furiously on a tablet. Kass and Jan watched apprehensively. The Pleasure Bubble, with its freight of the dead, was hurrying remorselessly to its rendezvous with the sunlight.

"Whoops!" Lents threw his tablet into the air in extravagant triumph. "She'll do!"

"Stations!" shouted Jan, in his curious strained voice, and men rushed eagerly to their posts, still hazy as to their object but cheered by the knowledge that there was hope after all.

Then began one of the strangest duels in the history of the solar system. Setting the nose of their vessel against the gigantic metal satellite, they directed the stern gravity buttons against a distant star, and applied full force to slow the sphere in its orbit.

The forces liberated were terrific. The sphere's tough skin, three inches thick, buckled and bent inward until the ship was almost buried in a pit of its own creation. Jan stood hunched over the activator lever like a great spider, ready to throw it into neutral at the first sign of an actual rupture, which would send them crashing through the internal cells and girders of the sphere.

"She's folding up like a squeezed orange peeling!" Kass muttered, running his hand over his bald head.

"Built to withstand internal pressure—nothing like this," Jan gasped. "Stout ship, this!" he added a moment later. "We thought we might have to ram our way out."

She was indeed a stout ship—this vessel of escape. Though she shivered and groaned, she gave no indication of failure.

"Wonder if the others are pushing against us!" Kass suddenly thought of another possibility.

"We—can—outpush 'em," Jan gasped. "Got to sit down. Here you take it!" Sine stepped into his place. Vague shocks and noises were transmitted to them through the hull. The huge sphere was collapsing progressively.

Lents came puffing from an observation port.

"She's slowing!" he reported triumphantly. "Our trajectory—give her a little more!"

The Joy Bubble was becoming more and more disc-shaped, and it was slowly turning on a major axis as the contending forces became uncentered.

"Flopping like a flapjack," Lents commented as he watched the shifting vista. A moment later; "It's a close squeeze. See there, past the horizon—a prominence?"

It was like a white plume, this jet of vapor thrown far into space. Not uncommon in Jupiter's turbulent atmosphere. But it was bright, dazzling! That meant they were not far from the sunlight!

"Pull away!" the fat mathematician shouted. "We have to take a chance!" Instantly Sine reversed the lever. Everyone grasped handholds as the ship backed out of the pit. Now they could see the vast ruin they had wrought. Sine gave her all the speed he dared, for the sun, for home!"

The great ruin was slowly turning, and in a few

minutes they saw again the darker shadow that was the fighting patrol ship, still clamped to her side. At the same instant the dull red pinpoint winked on. The Jovians had sighted them again! In a few minutes the hull was getting uncomfortably warm.

Lents laid down his pad.

"They will crash!" he declared. "But they have an hour, the fools! Instead of trying to burn us why don't they get into their space suits and free themselves?"

Jan, resting on the bench, shook his shaggy head.

"They are a great people, stupid but great. They will try to punish us till they die."

The wreckage drifted closer and closer to Jupiter, and still the red beam played steadily on the fleeing prisoners' ship. The distance had become so great that it could only be seen through an old telescope that the prisoners had somehow procured. But the prisoners were gasping. Their hull was cherry-red on the outside, and still heating. A few more minutes and the heat would be unbearable.

"They are getting closer—closer—they are in the sunlight. Now I can see better. I believe they will skip by—no! They've dived into the vapor! They're out again. Skipped out like a flat stone on water. Sinking again—almost over the horizon. Gone, I guess. Whew, it's hot!"

They were accelerating so fast that they had to turn on the interior gravity buttons to equalize the pressure on their bodies. Behind lay the vast, fog-bound planet of Jupiter. Ahead was the beautiful sun. And somewhere beyond, and still invisible, Earth the lovely, the green, the Mother of the human race!

THE END

For the February 1932 Wonder Stories

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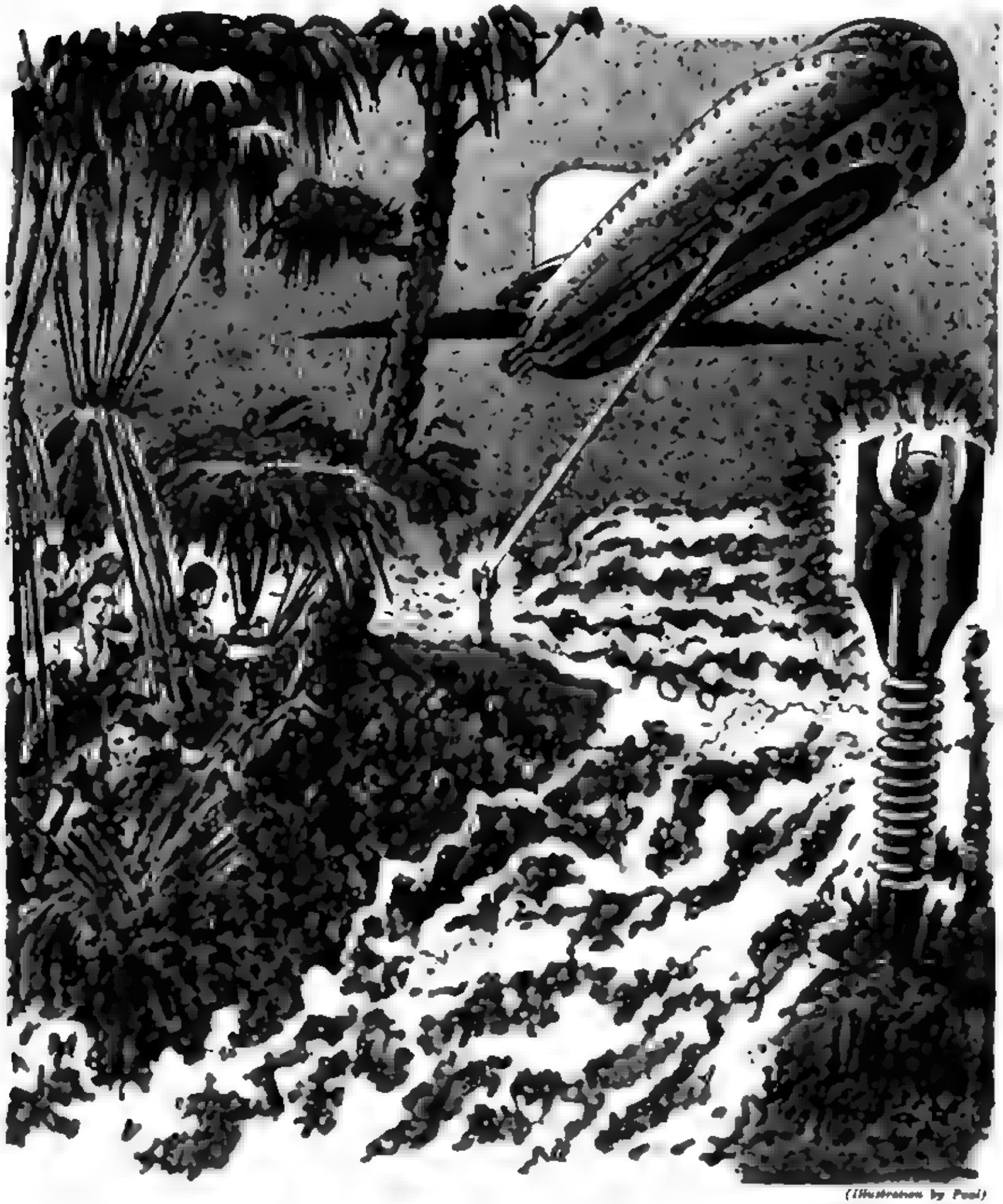
THESE STORIES AND OTHERS IN THE FEBRUARY, 1932, WONDER STORIES ON ALL NEWSSTANDS JANUARY 1, 1932

Spacewrecked on Venus

By NEIL R. JONES



(Illustration by Paul)

A beam of electricity leaped from the ship. Instantly shafts of light spread from the nearest projectile to the ones on either side of it.

I STOOD looking from the space ship into the dense fog banks which rolled about us. We were descending through the dense cloud blanket of Venus. How near we actually were to the ground I did not know. Nothing but an unbroken white haze spread mistily, everywhere I looked.

With jarring suddenness, a terrific shudder throbbed the length of the *C-49*, rattling the loose articles on the desk nearby. The dictatyper, with which I had lately been composing a letter, crashed violently to the floor. I reeled unsteadily to the door. It was nearly flung open in my face.

"Hantel!"

Captain Cragley steadied himself on the threshold of my room. The captain and I had become intimate friends during the trip from the earth. In his eyes I saw concern.

"What's wrong?" I queried.

"Don't know yet! Come—get out of there, man! We may have to use the emergency cylinder!"

I followed Cragley. The crew, numbering seven, were gathered in the observation chamber. Most of the passengers were there too.

The *C-49* carried twelve passengers, all men, to the Deliphon settlement of Venus. In the earlier days of space travel, few women dared the trip across space.

Several of the crew worked feverishly at the controls above the instrument board.

"What's our altitude?" demanded Cragley.

"Fifteen thousand feet!" was the prompt reply. "Our drop is better than a hundred feet a second!"

Worried wrinkles creased the kindly old face of Captain Cragley. He debated the issue not one moment.

"Into the emergency cylinder—everybody!"

Herding the passengers ahead of them, Cragley's men entered a compartment shaped like a long tube, ending in a nose point. When we were buckled into a spiral of seats threading the cylinder, Cragley pulled the release lever. Instantly, the cylinder shot free of the doomed *C-49*. For a moment we dropped at a swifter pace than the abandoned ship. After that, our speed of descent was noticeably decreased.

Peering at the proximity detector, Cragley announced that we were quite safe from a collision. The *C-49* was far below us and dropping fast.

"No danger now," he assured the passengers. "We'll come down like a feather. Then all we have to do is radio Deliphon to send out a ship for us."

Cragley was equal to the situation. In this year of 2342, when the days of pioneer space flying were commencing to fade into history, it required capable men to cope with interplanetary flight. If Cragley brought his crew and passengers safely through this adversity and also salvaged the valuable cargo of the *C-49*, it was another feather in his cap.

Quentin, second to Cragley in command, labored over the sending apparatus. Quentin looked up at his superior officer with an uneasy expression. The captain was quick to sense trouble.

"What's wrong?"

"I don't like the looks of this," was Quentin's reply. "The sender refuses to function properly. I can do nothing with it."

Cragley's face bore a troubled look. He stepped to the side of his subordinate for a hasty inspection of the radio sender.

"The receiver plate doesn't light up, either," said Quentin. "Looks to me as though someone has been tampering with this."

In their spiral of seats, the passengers looked silently and gravely upon the cylinder base where Cragley and his staff were gathered over the apparatus. A dull glow of cloudy light coming in through the transparent interstices of the descending cylinder softened and counteracted the glow of the radium lights. An intangible feeling of depression hung in the air.

"Elevation, five hundred feet!" announced one of the crew from his position at the altitude dial.

"Make a landing," ordered Cragley. "We can't be very far from where the *C-49* fell. If there's enough of the ship left, we may be able to discover the cause of this accident."

Down through the lush vegetation, the cylinder felt its way, dropping very slowly. Finally it came to rest on a knoll.

"How far are we from the ship?" queried the captain.

"About seventeen hundred feet south of it, I'd say."

"We'll go outside and get organized. We've got to get that platinum shipment off the *C-49* and get into communication with headquarters at Deliphon

NEIL R. JONES

INTERPLANETARY commerce, if and when it begins, will be fraught with all of the dangers that accompany pioneering expeditions. There will be the terrible climatic conditions on other worlds to be faced, strange beasts and plants; and perhaps desperate and greedy men. That was the case when every new land was opened on earth and it may be expected to be true when we conquer the solar planets.

Mr. Jones understands these things well. His vivid imagination, his sense of a good story and his knowledge of what may be expected upon other worlds combine to make this a novel and exciting yarn. And, as is always desired, it comes to a smashing finish with a surprising ending.

His scientific weapons are quite novel, but so realistically does he portray them, that they strike one as being quite possible and likely to be used at some future time.

somehow. The proximity detector tells us we're over two hundred miles from there."

One of the passengers spoke up with a suggestion. "Can't we go the rest of the way in this? You can send back for what's left of the ship. I've an important reason for arriving in Deliphon quickly. If—"

"Not a chance," cut in Cragley, both amused and annoyed. "The cylinder wouldn't take us anywhere. All the cylinder is good for is an emergency descent. It has no driving power."

PREPARATIONS were made for a trip to the wrecked space ship.

"Might I go with you and the men, Captain?" I ventured.

"Sure, Hantel, come along! I'll have to leave part of the crew here with the passengers and the cylinder, so I'm glad to have a few volunteers."

"Count on me, then," another of the passengers spoke up.

I recognized him as Chris Brady. He was a man about my own age, possibly younger, perhaps in his late twenties. Brady and I had become friends during the trip, having spent many hours together. This was my second trip to the clouded planet. Brady had made many trips to Venus, spending considerable time among the colonies. I had learned much about the man which had interested me.

Our party consisted of Cragley, Brady, three of the crew, four other passengers and myself. Well armed, we set out through the yellow jungle in search of the remains of the *C-49*. Quentin insisted that it was not far away according to the proximity detector which was especially attuned to the bulk and metal composition of the space ship.

Progress was difficult in spots, and we found it necessary to hack our way through lush growths of vegetation, taking numerous detours around interlaced verdure. We were out of sight of the cylinder almost immediately.

One of the passengers who had volunteered to accompany us complained at the prospects of becoming lost. Cragley calmed the man's anxiety with a brief explanation of the directometer he carried. It was an elaborate perfection of the old compass. On a square plate, our position was always designated in relation to the *C-49*. By telescopic condensation of the field, Cragley was capable of bringing Deliphon on the instrument. It was well over two hundred miles beyond us.

"If Quentin doesn't have that televisor fixed by the time we get back, we are in a jam."

"There's the ship!"

We looked where the pointing arm of Brady designated. The wrecked space ship lay imbedded in the murky waters of a swamp, fully one-third of its bulk out of sight. Above, the torn and tangled mass of vegetation bore witness to the rapid descent of the craft. Mighty branches were torn away from giant trees. The ship itself was enwrapped by interlaced creepers which it had ripped loose from the upper foliage.

We waded through warm, stagnant water which teemed with marine life. We were halfway to the side of the *C-49* when a cry from behind startled me into action. I turned and stared into the gaping jaws of a terrifying serpent wriggling through the shallow water on many legs. Several electric pistols flashed almost simultaneously. The loathesome monster turned belly up, floating dead upon the surface of the swamp water.

From then on, we advanced more cautiously. Coming alongside the crushed hull of the interplanetary liner, we made an inspection of its position. The space ship lay nearly right side up, the decks slanting a bit sharply to one side. Upon the outer deck of the *C-49*, Cragley scratched his head and looked the situation over.

"Not so bad as I'd feared," was his comment. "Wouldn't be much else but junk here if it hadn't been for the jungle breaking the fall." Cragley pointed upward to the strong barrier of interlaced foliage. "I hope to discover just why it was we fell."

"Wasn't there an explosion?" I inquired. "There was a great shock just before you opened the door to my stateroom. For a moment I thought we'd struck the planet."

"Yes—there was an explosion," Cragley replied, a bit reluctant to voice the admission. "It occurred somewhere in the mechanism operating our radium repellors. That's why the ship started falling. It's weight was left partly free against the gravity of Venus. We had to leave so quickly there was no time for inspection."

One by one, we descended into the wrecked *C-49*. In that part of the ship which lay lowest below water level, tiny streams of dirty water trickled between wrenched plates, forming pools of water which rose slowly about us. Cragley and his men inspected the radium repellors. They whispered strangely among themselves. A steely glint shone resolutely in Captain Cragley's eyes.

"There's deviltry been done here," he stated fiercely. "The *C-49* was deliberately wrecked by someone on board!"

Heavy silence followed his words. One of the crew returned from the vault room. He announced to the captain that the *C-49's* shipment of platinum was intact as they had left it. Captain Cragley turned the matter over in his mind. He was an astute man. Having smelled out a conspiracy, he was planning the best way he knew to thwart it. The platinum itself presented an obvious motive. Finally he spoke.

"You passengers are to go up into the observation room and wait for us. Under no condition are you to leave the room and wander about the ship."

Captain Cragley's orders were obeyed to the letter.

IN THE observation chamber, Brady asked my opinion of the discovery Captain Cragley had made. "What's up, anyways?"

I shook my head. Brady was plainly nervous. Others of the passengers who had accompanied us shared his apprehension. Fully a half hour had passed and still Cragley and his men put in no appearance. Outside, myriads of life flew, crawled and swam about the damaged craft.

Presently, Cragley and his three men emerged from the lower levels of the *C-49*. They presented an uncouth spectacle bedraggled as they were with grime and dirty water. In their arms they carried many small boxes. Though small, each box was extremely heavy, being loaded with a fortune in platinum bars.

"We'll return to the cylinder," said Cragley. "There's important work to be done."

Once more we trudged back through the swamp and jungle, following the trail we had made. Several times, huge shadowy forms flapped on the wing overhead, but there was no attack. Back at the cylinder, Captain Cragley ordered every man out into the open. He drew their attention.

"There's serious business here," he said slowly, his eyes darting from face to face. "I want the man, or

men who wrecked the *C-49!*"

The captain snapped out the final words. Surprise, terror and alarm registered among the passengers, but Cragley evidently saw no admissions of guilt.

"The man who is responsible for our present condition owns this!" exclaimed Cragley suddenly. From behind him where he had been concealing it, he drew forth a square box studded with knobs and dials. "I know which one of you owns this. It was found hidden in his room by one of my men."

Again Cragley watched for a betraying face. At the time, I doubted Cragley's statement that he knew who owned the box. If he knew, I asked myself, why was it he did not come right out and make an accusation with whatever evidence he held? But that was not Cragley's way.

"We've also uncovered his two accomplices," continued the captain in cool, level tones. "There is proof which points definitely to them."

He paused. No one spoke. The silence of death had descended upon the entire group. For a moment my scalp prickled from the high tension of nerves which hung over this episode. Cragley's burning eyes made every man of us a criminal.

"The penalty for this offense is—death!" Cragley hurled out the final word with dramatic suddenness.

There was a stealthy movement among those who stood near the cylinder.

"Drop it!" snapped Quentin. "Or I'll bore you!"

One of the passengers, Davy by name, dropped an electric pistol and raised his hands.

"Raynor!" thundered Cragley, pointing a denunciatory finger at another of the space ship's passengers. "Let's have an end to this shamming! Step out there with Davy! Give up your weapons!"

With the attitude of a fatalist, Raynor stepped forward, allowing Quentin to disarm him.

"And now for the owner of this little box," said Cragley, a cryptic promise in his tones. "This radio-electrifier excited an electric explosion of static in the radium repellors. The reason, I suppose, was prompted by designs on the shipment of platinum. Will the owner of this ingenious little invention step up—or do I have to call his name?"

No one moved.

"Just as I thought, Brady, you have the nerve to bluff this thing out to the finish!"

The face of Chris Brady grew pale. He appeared stunned. Those nearest him stepped back in surprise. Davy and Raynor were the only ones who did not seem taken aback by the revelation.

"But I've never seen that thing before," Brady protested. "Why, I——"

"Not a chance of wiggling your way out of this, Brady! We've got the goods on you sure enough! Will you kindly explain how you intended making a getaway with the platinum?"

"I'm innocent!" exclaimed Brady heatedly. "I don't know these men!"

"This contrivance was found hidden in your room, Brady! Communications between you and these men were also found!"

Chris Brady fell silent. The evidence was overwhelming. Cragley turned to the other culprits.

"Have either of you protests to make?"

"We know when we're caught," growled Raynor, shooting a swift glance at Brady. "You've got the goods on us. We're not squawking."

"You were taking orders from this man?" the captain inquired, pointing at Brady.

Both Davy and Raynor replied in the affirmative, adding further proof against Brady.

"Known him very long?"

"Don't know him at all," replied Raynor, "only that he's the boss."

"We've been taking orders from him since we left the earth," supplemented Davy. "He had us kill the radio equipment a little while before he set off the explosion."

"And how did you expect to get away with the platinum?"

"He's the only one of us who knows," replied Davy, nodding his head at Brady.

"Brady, I suppose there'll be another ship along pretty soon—some of your friends from Deliphon. Now I see it all. Well, they won't find us, that's all. We won't be here."

"I've no idea that . . ."

"Pretty thorough, weren't you?" snapped Cragley. "But you slipped up a few notches! Thought there wouldn't be much left of the ship! Too careless, Brady! You three men are sentenced to death!"

"A trial!" screamed Brady. "We're entitled to a trial!"

"Not under the new interplanetary laws! This is far worse than mutiny, and you're on Venus now! You've had your trial!"

CHAPTER II

GRIM retribution overhung the condemned men. It promised swift justice. Captain Cragley was the law. He dealt out the penalty according to the code governing interplanetary navigation.

"We must get away from this vicinity in a hurry!" he informed Quentin. "You can bet your last coin there'll be a ship around pretty soon to pick up the platinum and these three men! If there's a battle, we haven't a chance in our present condition!"

"Where'll we go?" asked Quentin. "Somewheres and hide?"

"We'll head for Deliphon. It's a long, hard tramp, but it's our only chance. Get things ready to leave. Pack everything we'll want to take with us. Just before we start, we'll have this execution over with."

Quentin immediately apprised the crew and passengers of the *C-49* of Captain Cragley's intentions. He stated the fact that brigands were expected shortly, telling of what they would do to luckless passengers who fell into their hands. A second expedition was sent to the *C-49* for food stores and various articles it was deemed necessary to carry along on the march.

With the usual brief ceremony required in such proceedings, Brady, Davy and Raynor were lined up before a shallow grave which had hastily been dug for them. Five of the crew stood at attention, electric guns half raised. Cragley, in a crisp, steady voice, gave the orders. The three men, white of face, stared fascinated at their executioners—into the face of death.

"Ready!"

The men of the *C-49* tensed themselves. Brady no longer expostulated on his pleas of innocence. He faced his fate like a man.

"Aim!"

The pistols were raised. Five left eyes closed. Sights were drawn. The interval preceding the fatal word seemed endless. At the last moment, it was apparent that Brady was unequal to the strain. He closed his eyes. His body swayed.

"Fire!"

Five blue streaks shot noiselessly from the weapons. The three men stiffened and fell—into the cavity dug for them. Their lives had been forfeited for their crimes. Dirt was shoveled upon them. No longer

would fliers of the space lanes fear them. But there were other outlaws.

Captain Cragley, his crew of six, and nine passengers, set out in the direction of Deliphon. The trip promised to be perilous and fraught with danger, as well as grueling and full of hardships. Though I had been to Venus once before, I knew little of the yellow jungles. My time on the clouded world had been spent in the colonies.

Our first day of tramping took us through lush jungles and dismal swamps. The ground was fairly level. Occasionally we came to rough, rocky outcrops which protruded above ground. These we invariably circled. Several times we found it necessary to ford rivers and skirt lakes. Our progress was very slow. Quentin prophesied we would be on the march for fully twenty rotations of Venus unless we struck the comparatively clear country which Cragley was sure existed between us and Deliphon.

Fearsome beasts menaced us at all times. We were ever on our guard, and they usually fell electrocuted before completing their charges among us. Even so, we experienced many narrow escapes. Many of these monsters were larger than the prehistoric dinosaurs which once roamed the earth. They were difficult to kill, and it required the maximum voltage of our electric guns to bring them down.

Clothes torn, bodies bruised and scratched, we presented a sorry spectacle. Most of us felt the way we looked, but Cragley's unquenched determination spurred us on toward Deliphon. He was anxious to put a good distance between us and the abandoned cylinder. He feared the brigands, friends of the three who had been executed. Though Brady had not admitted the claim, the captain was certain a shipload of the outlaws were scheduled to show up for the platinum and their comrades.

At night, a camp was set up. Cragley argued against lighting a campfire, asserting that it would prove a magnet to the wandering brigands he believed were in search of us. Quentin, employing smooth diplomacy, made it clear to his superior officer that a campfire promised to safeguard us from prowling beasts. Quentin cited the fact that it was a common sight for a night cruiser of Venus to look down upon fully a dozen or more campfires of the troglodytes.

GUARDS were posted during the night. It was well. The fires held the nocturnal creatures at bay. Whenever one of them did muster enough courage to charge, it was revealed in the firelight and shot down. Several times I awoke to see a bellowing monster crash in death at the edge of our camp. Sleeping, we found was a fitful task. The first night proved the worst.

Next morning, we plodded on again through the thick, yellow jungle. The country became a bit hilly, yet none the less wooded. In the valleys between, we often found swamps. While approaching one of these swamps, we noticed a gray mist hanging over the stagnant pools. It appeared not unlike the steaming vapors we had previously encountered. One of the crew, plunging ahead of us to gauge the depth of the water and steer us clear of treacherous, clinging mud, became enveloped in the mist. Almost immediately his complexion turned black, and he fell strangling in throes of death. Another of the crew ran forward to drag back his comrade, but Captain Cragley warned him back.

"He's too far gone! There's nothing we can do for him!"

"What is it?"

"A poisonous swamp gas! There's enough poison in one breath to kill twenty men!"

Instinctively, we recoiled from the milky haze.

"How are we to cross?" asked Quentin.

"Put on the space helmets!" ordered Cragley. "That stuff can't hurt you unless you breathe it!"

To prove his words, Cragley donned his space helmet and advanced into the mist. Looking back through the transparent facing of the helmet, he beckoned to us. Previously, many of the passengers had rebelled against Cragley's persistence that they carry the added weight of the space helmets. It had seemed utterly useless. Now, as they moved unharmed through the deadly fumes, they thanked his foresight.

We carried the dead body of the luckless man, who had saved us through his unfortunate discovery, to the top of the next hill where burial was made.

The second night, it came my turn to share guard duty with one of the crew while the others slept. The fires were plentifully fueled with dry branches and stalks. Fire material was piled in reserve. Grinstead, my companion watcher, went his rounds while I attended the fire, keeping the flames well supplied.

Protected by an embankment erected near a rocky ledge, the balance of our party slept. My eyes fell upon the little mound of boxes which contained the precious metal. Cragley and Quentin lay on each side of the platinum shipment. Not since we had commenced the march had they let it out of their sight or reach.

"Hantel!" It was Grinstead's voice. "Come here a moment!"

Hastily I ran to his side. He was stooped over a mark on the ground far to one side of our camp just within circle of the firelight. Mutely he pointed to a footprint—the footprint of a six-toed man.

"Troglodytes!" I exclaimed.

Grinstead nodded. "Fresh, too! Think we'd better awaken Cragley?" he asked. "These cave men don't seem bad when they're peaceful, but if they get going —they're devils!"

I stared back into the alarmed eyes of Grinstead and pondered the matter. I was about to voice an opinion, leaving it up to Grinstead to do as he pleased, when a startled cry rang out from the direction of the sleepers.

Instantly, everything was confusion and uproar. Sleek, naked bodies prowling about our equipment flashed out of sight into the jungle. The whole camp came awake, exclamations and profanity mingling with the weird cries of the troglodytes. Recovering from my surprise, I fired a shot at one of the rapidly disappearing cave men, but the flickering firelight distorted my aim.

Then occurred the most amazing feature of the whole affair. A man, fully dressed, ran out of sight with the troglodytes, melting into the shadows of the surrounding jungle. Cragley ran up beside me and saw him too. He was out of sight before either of us had a chance to fire. At first, I had thought the man to be one of our party, but his flight with the cave men disproved the assumption.

"Wonder what the idea is?" spluttered Cragley.

"Our equipment," said Quentin, pointing to the food stores and other articles the cave men had hastily disarranged. "They came to steal!"

"But the man!" I insisted.

"A renegade!"

Cragley shook his head. "It's queer," he said. "I don't know what to make of it."

AN EXAMINATION of our equipment proved we had suffered few losses. Several boxes of synthetic food were gone, and one of the crew had lost his electric pistol. Aside from these thefts, nothing else appeared to be missing. Cragley tripled the guards, and the rest went back to sleep once more. Nothing else occurred during that night. I was unable to get the fleeing renegade out of my mind. There was something familiar about the figure as I had seen it revealed in the glare of the firelight just before the savages disappeared in the jungle.

The thefts of the food and pistol were logical enough in view of the fact that the troglodytes had stolen them, but, guided by the man, why had they neglected stealing the platinum? Evidently, they were unaware of its presence.

Murky morning suffused the perpetually clouded sky, and once more we pushed on toward our goal, distant Deliphon—so near and yet so far. Much to the relief of everyone, we came out of the jungle into a comparatively open country. High grasses grew about us, but the going was much easier than we had experienced while in the jungle. The land before us was a bit rolling and hilly. Leafy copses dotted the landscape as far as the eye might reach. In the open, the danger from lurking beasts was at a minimum. Our hopes rose higher.

It was around noon when the space ship from the south cruised into view above us. Cragley viewed it in consternation.

"The brigands! Now we're up against it!"

For a moment, pandemonium reigned among the frightened passengers. All had plans, each one trying to put his own into force at once. Out of the chaos, Captain Cragley gathered order.

"Head for the bushes!" he cried. "We're all armed! If they come too close, let them have it!"

The assurance in Cragley's voice I knew was faked. Like him, I realized the desperate odds which confronted us. The ship was high above. We had plenty of time to scurry for cover before it dropped lower. Cragley and Quentin arranged us to the best advantage, and we waited for the initiative of the outlaws of Venus.

The ship descended several hundred feet away. Our retreat into the bushes had been carefully watched. Several men left the craft and came slowly, uncertainly, toward our position.

"Stop where you are!" snapped Cragley from his place of concealment.

"Come across wi' the metal!" shouted one of them in a high pitched voice. "An' get outa there—or get riddled!"

Cragley's reply was a blue spurt from the muzzle of his pistol. The distance was much too far for accurate firing, but the charge went dangerously close. The outlaws immediately turned tail and ran for their craft. We waited for their next act, knowing that the battle had only commenced.

The space ship shot skyward, circling our wide clump of bushes. The survivors of the *C-49* tensed themselves for a destructive bombardment from above. It did not come. Captain Cragley was plainly surprised. He was aware that the outlaw ship carried instant death if they chose to use it.

The craft hovered some two hundred feet above us. Cruising slowly in a circle, it suddenly dropped four objects well outside our improvised stronghold. The projectiles were shaped like torpedoes. The explosions which were expected never came. The projectiles stood straight up from the ground, their front ends imbedded deeply. It was all a strange procedure. Cragley was nonplussed.

"They probably contain explosives," ventured Quentin, answering the question he knew stood out in the captain's mind.

"I'm not so sure of that," said Cragley.

Meanwhile, I had been doing some rapid thinking. Anxiously, I watched the ship above us, keeping myself partially screened from view of any sniper who might be looking down. I turned to the captain, a wild plan outlined in my mind.

"Let me go out there," I offered. "I can——"

"Not on your life!" he exclaimed, placing a restraining hand upon my arm. "It's death to go out there!"

"It's death to remain," I assured him earnestly.

"But not definitely certain," he maintained. "For some reason or other they're holding off from us. We have an advantage of some kind, but damned if I know what it is."

"Look!" cried Quentin.

He pointed to three of the four projectiles which were visible from where we lay. They were glowing strangely with intense light. A jagged beam of electricity leaped out from the airship. Instantly iridescent shafts of light spread from the nearest projectile to the ones on either side of it. The shafts made a flashing display, crooked, forked and darting.

"Lightning bolts!" exclaimed Cragley. "We're surrounded by a fence of them!"

"Penned in—like rats in a trap!"

"What will they do now?"

"Hard to tell. Probably pick us off one by one at their leisure. They seem to be going to a lot of unnecessary trouble for no reason at all."

Three sharp blasts of sound issued from the outlaw ship. A pause, and then followed three more. I watched Cragley to see what action, if any, he would take. He seemed undecided. I began to grow uneasy.

"Not a chance of breaking through that screen of electricity," said Quentin. "They got us right where they want to keep us."

"But why?"

Quentin shook his head. "If it was just the platinum, they could destroy every one of us, then come in here and take it."

CHAPTER III

WEIRD figures suddenly burst the walls of flaming death. They were outlaws attired in strange accoutrements. A series of metal rings surrounded them, connected to their bodies with spokes. The electrical discharges darted all over the rings. As they came closer, we discovered that they were not surrounded by separate rings but with a continuous spiral which narrowed together at the top of the head. The other end dragged on the ground.

"Electric resistors of some kind!" muttered Cragley whose face wore a hopeless expression. "They walked right through those lightning bolts!"

Quentin aimed his pistol and fired at one of the slowly advancing figures. The spiral glowed faintly. The outlaw continued his approach.

"There goes our last chance!" I cried. "We might just as well toss up the sponge!"

Cragley was thinking fast. It was unlike him to give up without a fight. But what was he to do when his weapons had been shorn of their force, leaving

him utterly helpless before the superior strength of the brigands.

Several figures rushed from the bushes. They were panic-stricken passengers. In alarm, despite the warning cry the captain hurled at them, they rushed straight past the advancing figures with their encumbering spirals. Frightened, bewildered, and hemmed in by the play of lightning, they ran directly in the path of the electric fence. The crackling bolts enfolded three of them before the fourth became startled out of his madness, retreating from the flashing death.

One of the spiral clad figures turned and regarded the frightened man for a moment. Raising his electric pistol, he fired, and the passenger from the ill-fated *C-49* joined his companions who had futilely rushed the electric barrier.

A voice from the space ship of the brigands suddenly gave out an order. The voice came from a speaker and was many times amplified.

"Crew and passengers of the *C-49*—come out in the open. Bring the platinum with you. Keep away from the electric fence unless you wish to die. Come out—or we shall come in and hunt you down."

The spiralled figures inside the fence had stopped at sound of the voice and were waiting for us to comply with the order from the space ship. More of the brigands in their electric resistors were advancing through the lightning bolts which crackled noisily. The powerful voltage danced and played upon the spirals, disappearing into the ground.

Cragley paused, undecided. Lines of broken resolve creased his face. Previously, he had remained strong and stubborn in the face of overwhelming adversity when chances were slim. There now remained not even the slimmest of chances, and stubborn courage yielded to reason.

"I guess the game's up, Quentin." He turned to regard his under officer in speculation.

Quentin waited for his captain's orders. Again came the voice from the outlaw craft in its strident tones. They were tinged with a touch of impatience.

"Show yourselves inside of one minute, or else be executed at once! Unless——"

"Hold out!" cried a new voice from the speaker, breaking in upon the first voice. "You have friends on——"

Then came sounds of scuffling. To our ears came imprecations and curses.

"Don't go out there!" warned the second voice in laboring gasps. "Stay——"

With a sudden snap, the speaker was cut off. Nothing more was heard. For a moment the lightning bolts comprising the electric fence flashed out—then reappeared. A few seconds later they disappeared once more, returning shortly to flicker in a peculiar manner.

It was evident that some sort of a struggle was taking place inside the outlaw ship. The electric display crackled and sputtered louder than ever. With a sudden, explosive thunder clap, the four terminal posts blew to pieces.

The spiralled figures turned in alarm back toward their craft. One of them, hovering close to our haven of retreat, did not follow his comrades. Instead, he drew forth from a long side pocket a black object. At first glance, it seemed shaped like a pistol. But it was much longer and was proportioned differently.

He waited patiently until several more of the brigands had returned to the ship. Raising the black weapon, he aimed carefully at his fellow outlaws. The man's strange actions amazed me. He was turning upon his own comrades. Several of the brigands fell backward off the deck of the outlaw craft.

Cragley, beside me, was speechless in surprise at the rapid succession of events. The outlaw's strange weapon which emitted no flash had us all wondering. Later, we discovered that it was a radium gun, a new instrument of destruction still in the experimental stage.

"Who is he?" voiced Cragley.

"Can't be the fellow we heard over the speaker," observed Quentin. "This man came through the electric fence with the first ones."

"Somebody over there is pulling for us," insisted Cragley, "and the man with the black gun must be a friend, too."

A flash darted out from the ship, hitting the spiralled figure operating his mystifying weapon. The spiral glowed brilliantly. The man inside the spiral remained unaffected, continuing to manipulate the knob of his weapon. Something went wrong with it, for the outlaw who had so suddenly turned against his friends tinkered with it a moment, then threw it from him in disgust. Meanwhile, the brigands had massed inside the ship.

WITH a loud crackling, the speaker's volume was thrown on again. An alarmed voice vibrated in our ears. Above the words came a rattling and banging—also the muffled sound of shouting men.

"Jasper! Come t' the control room! I'm locked in! They're bustin' down the door! Bring that gun o' yours! Hurry, lad!"

Jasper looked upon his broken weapon, hesitated a moment, then picked it up—butt foremost. Seizing it in cudgel fashion, he made for the ship.

"Come on!" roared Cragley exultantly. "Now's our chance!"

We found our numbers reduced to ten, but every one of us leaped forward at Cragley's order, ready to stake everything on the one desperate, fighting chance which had come so unexpectedly. We had nearly overtaken the man we had heard addressed as Jasper when a crackling flame of lightning leaped out at us. A hissing roar smote our ear drums and we were temporarily dazzled by an intense light. The aim had been too high. The electric charge had gone over our heads. The man in the control room had frustrated the attempt to electrocute us.

Several of the brigands jumped out of the ship to meet us. They still wore the encumbering spirals. A powerful gas of paralyzing effect was shot into our faces. We became as immobile as statues. Jasper, too, was overcome. Instantly, we were divested of our weapons.

The man locked in the control room of the ship had been taken. Whoever these two men were who had championed our cause, their desperate efforts had failed, and now we were all in the same boat. The one who had addressed us over the speaker was led out of the ship and shoved into our group beside his fellow traitor, Jasper. The latter's spiral was promptly torn off.

As the outlaws passed among us, searching for concealed weapons, I felt a cold object thrust cautiously into my hand. My heart thrilled to the contact of a pistol. I held my hand close to my side that none might see. The effects of the gas wore off quickly.

The chief of the brigands, his brutal face set in anger, strode up to the pair who had turned against him during the stress of combat. His dark eyes blazed, and he raised his clutching hands menacingly above the two. Jasper and his friend stared back unabashed, a

reckless glitter in their eyes, ready for what might happen.

"I don't know who you are, but I've got suspicions!" snapped the outlaw. "You'll both die horribly—the kind of death we reserve for such as you!"

He turned upon Cragley. "Where's the platinum?" he demanded. "Is it over there?" He pointed to the clump of bushes from which we had lately emerged. "Or have you hidden it?"

"See for yourself!" snapped Cragley.

"When we find it, all tongues will be silenced," he remarked significantly. "If it's hidden, we'll find it just the same. We know how to make tongues wag."

It was a desperate situation. Cragley knew that the time of reckoning had come. The platinum lay in an open space among the bushes where we had taken our stand on seeing the approach of the outlaw ship. I fondled the gun I held out of sight.

Leaving a large force of his men to guard us, the leader of the brigands took the balance of his men and headed for the spot where Captain Cragley had left the boxes of platinum.

"Well, Ben," observed Jasper, philosophically scratching his head, "we did the best we could."

"Which weren't quite enough, Jasper, m'lad."

"Who are you two?" queried Cragley.

Each one looked at the other questioningly. For a moment neither spoke. Then through a rough, unkempt beard, Ben grinned at his companion.

"Might as well tell 'im, Jasper. The game's up."

"We ain't outlaws, that's sure, though we might have made believe so," said Jasper. "He's Ben Cartley, the best pal a man ever had. I'm Jasper Jezzan. We're from the Hayko Unit."

My mouth fell open in surprise. I nearly dropped the gun I had kept concealed in a fold of my clothing. Everyone, at some time or another, had heard of the famous Hayko Unit. The order, established since the perfection of space flying, was comprised of men pledged to keep the space lanes and colonies safe from the lawless element.

"We'll be in the death unit when Ledageree and his men come back," cracked Ben, chuckling at his own grim joke. "Did you plant the platinum, or is it back there?"

"Back there," echoed Cragley dejectedly. "We haven't a chance. I thought maybe we could make Deliphon with the stuff before these outlaws got wise."

"We followed the trail easily from the air," remarked Cartley. "First, we found the space ship and the cylinder. After that, we just watched for the green campfire markers is all."

"Campfire markers?" questioned Cragley in excitement. "What do ——"

"There comes Ledageree!" interrupted Jasper.

The brigand chieftain and his men were emerging from the bushes with the little boxes stacked in their arms.

"We're sunk now!" exclaimed Quentin.

Impulsively, the captain took a step in the direction of the space ship. One of the outlaws guarding us stepped forward before the captain, bringing up his pistol. An evil light shone in his eyes, the fanatical gleam of the confirmed killer. It was the man's intention to kill Cragley where he stood.

BUT the act was never consummated. A blank look overspread the outlaw's face. His face held that strange expression which is so characteristic of the electrocuted man. He tottered and fell face downward. Uttering a cry of agony, another of the brigands fell, seizing frantically at a shaft which protruded from his body, a shaft of crude hammered metal.

While we all stared in surprise at the fallen men, Jasper Jezzan, quick to take stock of the situation, looked out over the high grass.

"Troglodytes!" he cried. "That's one o' their metal darts, Ben!"

Substantiating Jasper's discovery, there came a chorus of yells from all sides. Heads came into sight above the tall grass. Darts flew thick and fast, yet every one found its mark. The cave men of Venus brandished their weapons preparatory to rushing in upon us in overwhelming numbers.

The outlaws blazed away at the savages, but the latter proved to be difficult targets at which to aim. They were always on the move, running, hiding, reappearing to launch their deadly darts from another direction. Ledageree dropped his armful of the precious metal and screamed an order.

"Into the ship!"

It was then that I noticed the curious fact that none of the passengers or crew of the *C-49* had been hit. The remaining outlaws attempted to herd us into the ship. Their numbers rapidly diminished under the hail of darts cast at them so accurately by the troglodytes. Many of the cave men toppled over in death as the outlaws made a hit, but more came to take the places of those fallen.

"There's the white man—the renegade!" shouted Quentin.

Indeed, it was so. The troglodytes were led by the man who had broken into our camp on the previous night. Seizing a pistol from one of the fallen brigands, Ben hastily pointed it at the yelling cave dwellers who were running full force in our direction, the renegade at their head.

"No. Ben, no!" cried Jasper. "They're friends!"

"It's Brady!" shouted one of the passengers of the *C-49*. "Chris Brady!"

"Impossible!" exclaimed Cragley. "He's dead!"

"You're wrong, Cragley!" said I, also recognizing the renegade. "That is Brady!"

I heard a noise behind me. I turned and looked. Ledageree and two of his surviving brigands were clambering aboard the space ship. The horde of troglodytes were nearly upon us. In trepidation, I moved backward. Ledageree had gained the deck and was running in the direction of the air lock when Brady saw him, raising his pistol to fire.

From its concealment, I brought my gun into action. With hasty aim, I pulled the trigger, cursing myself for a wide miss. I was a bundle of nerves at the moment. Again I tried, this time drawing a fine bead. Chris Brady was clearly outlined beyond the sights of my pistol.

A split second before I squeezed the trigger, Jasper Jezzan seized my arm. The flash of power shot harmlessly into the sky. Fiercely, I battled with the Hayko man, raising my pistol to brain him. But Cartley was upon me, and I went down under their combined weight. Something hit my head. Blackness engulfed me.

When I regained consciousness, I was aware of the babble of voices. My head throbbed and swam dizzily. A ring of troglodytes encircled me. I heard Chris Brady talking. Had he come back to life in some miraculous manner? I had seen him shot and buried. His words penetrated my dazed senses.

"When I saw that everything was stacked against me with no chances of proving my innocence, I tried an old trick, Cragley. I was afraid you'd get wise to me, but you didn't. I fell a split second before your

men fired. I watched your lips for my signal. None of the shots touched me. I played dead and was buried in the shallow grave. When you went, I dug myself out. I came pretty near smothering."

"We buried you alive!"

"You did, and I'm thankful I was alive—and still am."

"But the troglodytes?"

"My friends," replied Brady. "I've been among them a great deal during my life upon Venus. I know their language and customs. They look up to me and obey my orders. We've been following you. The other night, we broke into your camp and stole food and this pistol."

"Then you're not the outlaw we supposed you to be?" Cragley was amazed beyond words. Apologies flooded to his lips and remained unspoken. What apology could there be to this innocent man he had all but sent to his death?

"No—I'm not, but I knew there was no way of proving it to you," replied Brady, "at least not until Deliphon was reached. With my friends, here, I followed your trail. We heard the sounds of fighting far ahead. When we found you attacked by outlaws, I knew it was my chance to save you and prove myself."

"You have proved yourself!" exclaimed Cragley warmly. "But what about Raynor and Davy?"

"They thought Brady was their leader they'd been told t' watch for!" interrupted Jezzan spiritedly. "Plain as day, ain't it, Ben?" He turned to his comrade for a confirmative nod. "There's your man!"

Jasper Jezzan pointed at me where I sat on the ground, collecting my wits. I knew that I had been caught red handed. Denials were useless.

"Ern Hantel!" exclaimed Cragley in surprise. "He's the last man I'd suspect!"

"Just the same, he's the man you thought Brady was," persisted my prosecutor relentlessly. "He put green flares in your campfire ashes, so's we could follow you."

"How did you men come to be with the outlaws?" asked Brady, a bit confused by the surprising revelations he had heard.

"The authorities at Deliphon have suspected this gang for quite a spell," replied Cartley. "Jasper and I joined 'em t' find out. We're much obliged t' you and your cave men, Brady. You got us out of a tight pinch."

Cragley confronted me. "What have you to say for yourself, Hantel?" he asked grimly.

"They've got my number right," I grumbled, rubbing an aching head. "No use bucking a Hayko man in a place like this." I nodded in the direction of Jezzan and Cartley. "Ledageree was warned against strangers."

"Then you admit Brady is innocent?" queried the captain, seeking the confession which would irrevocably clear the accused man.

"Yes. He's innocent. Davy and Raynor never knew me. I sent my instructions to them through Brady, leaving messages where they believed he'd left them. When we left the earth, I recognized Davy and Raynor right off. For secrecy's sake, they weren't supposed to talk with the man they took orders from. I took advantage of this fact by placing my article of identification in the possession of Brady."

"The brown collars you loaned me!" exclaimed Brady, realizing the mode of his undoing.

"After I'd first stolen your collars and destroyed them," I added. "I was afraid of something going wrong before Ledageree and his men picked us up. I blew out the radium repellors of the *C-49* and planted the evidence in Brady's room. I knew if anything happened Raynor and Davy would identify him as the man from whom they took instructions. That left me a loophole."

"The case against you is completed, Hantel!" Cragley's face was stern and set. "You're the one who's going to be shot this time, and there won't be any chance of falling before my men fire, either!"

"Just a minute," interposed Jezzan, thrusting back the angry captain. "We've got a say here. Headquarters wants this man. He's got more information than he's given. There's some other affairs he can talk about. He's going back with us."

Cragley didn't argue the matter. It was beyond his authority. Besides, if I received my just dues, he cared little where I was executed.

They placed me under strong guard on the outlaw ship, and we flew back to Deliphon. Knowing me for the clever, resourceful criminal which I pride myself on being, Jezzan and Cartley personally conducted me to the earth. There, I was given a brief examination.

At present, I find myself in the interplanetary penal colony of Phobos where I am being held for reasons peculiar to the Hayko Unit. I expect death most any day. In the meantime, I spend much of my numbered hours gazing out of my prison into the realms of space. The rotating sphere of Mars stands prominent against starlit skies. Occasionally, I see Phobos' companion moon, Deimos. Beyond the transparent facing of my prison cell stretches an airless void. There is but one escape. I await it, absorbed in fatalistic reflection.

THE END

Interplanetary Plot Contest

The $1000 prize for the best Interplanetary Plot for the Winter 1932 WONDER STORIES QUARTERLY has been awarded to Edward Morris, 3914 W. Monroe Street, Chicago, Ill.

We are now ready to receive plots for consideration for the $1000 prize to be awarded in the Spring 1932 QUARTERLY.

As announced, the prize winning plots will be worked up by our best authors and used in stories in the QUARTERLY.

Write for details of the Interplanetary Plot Contest to Editor, WONDER STORIES QUARTERLY, 98 Park Place, New York.

The Revolt of the Star Men

(Continued from page 245)

Selba which was sprawling on the floor, beside the pilot seat. A gaping hole in the tough metal plating under his right arm, and a thin trickle of blood, told clearly what had happened. "They got him," the Earthman muttered. "But why?"

Jan's eyes had wandered to the narrow desk before the pilot seat. There were the instruments and devices by means of which the ship was controlled, and there was the lever which had moved the ray projector in its mounting just beneath the nose of the craft. A calculating pad and a stylus were lying on the desk.

Something was written on the pad—a message. She called to Shelby, and together they read the brief, hastily scrawled note. It was in English:

"To Janice Darell and Austin Shelby, Greeting. Alkebar is breaking into the ship, and Telaba is coming. You will be with him, I know. From among my enemies I have chosen my friends. A man must have friends, and traitors do not serve. Forgive me for stealing your glory, Mr. Shelby. I shall be grateful. *Sidi Yadi,* Hekalu Selba, Akar."

Shelby looked at Jan and then at Telaba who was standing close beside them. "So that's it," he said slowly. "Nobody is totally bad."

"Not even Hekki," Jan put in. A hint of a wistful smile flickered about her lips. "I guess it's the end now," she went on. "A glorious adventure. Back to Earth!" Her voice had taken on a dreamy exultant quality.

"The end, Jan?" Austin asked. "Haven't you forgotten something?"

She looked puzzled, and then she laughed a brief gay little laugh which made roguish dimples twinkle in her cheeks. Even her fantastic attire could not hide her beauty. "You ridiculous old dumb-bell! Of course it isn't the end—just the beginning—with you!"

It was a considerable time before Shelby was able to repair the *Selba* sufficiently so that she could get underway for Mars but the task was finished at last. Escorted by the rebel chief's fierce hordesmen, they set out for the Red Planet.

Somehow, snatches of the ancient Bedouin song tinkled in Shelby's mind. He had read old books. "Across the desert I come to thee, On a stallion shod with fire . . . . . ."

That did not quite fit the situation, for Jan was with him. But his steed, the *Selba,* was truly shod with fire. The rocket nozzles—and damaged though she was, she behaved like a thoroughbred. And out there in the void beside the ship—what were those shapes? —bizarre, impossible, yet real—real.

* * *

In docks scattered over Earth and Mars, battleships of space and their crews wait expectantly for an alarm that may never come. Telescopes comb the sky. Out there the Star People, new arrivals in the solar system, are shifting, moving about restlessly. But the planets feel secure. Their fleets could cope with the Space Men, were they a hundred times more numerous. And once in a while, on the desolate Sahara, or Mohave or Taraal, shadows come, settling down like flecks of darkness from the midnight heaven. They are Telaba's and Ankova's people. For a while—a day perhaps—they stay, bartering their exotic treasures for human wares. Then silently, mysteriously, they are gone, into the night. . . . . .

THE END

For the January, 1932, Wonder Stories We Offer

Martian Guns
BY STANLEY D. BELL
Upon the moon's bleak surface, the little crew searched desperately for the secret of the menace . . . . .

The Derelicts of Ganymede
BY JOHN W. CAMPBELL, JR.
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BY P. SCHUYLER MILLER AND DENNIS McDERMOTT
With the girl as his pawn, Lem Gulliver used cunning against cunning in a battle for freedom . . . . .

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What Is Your Science Knowledge?

Science Questions and Answers

The Reader Speaks—Letters from Readers

ON ALL NEWSSTANDS DECEMBER 1, 1931

The Martian

By A. R. Hilliard
and Allen Glasser

(*Illustration by Paul*)

The water was evaporated by the ever-shining sun until there was none left for the thirsty plants. Every year more workers died in misery.

The Martian

based upon the Third Prize ($15.00) Winning Plot of the Interplanetary Plot Contest won by Allen Glasser, 1610 University Ave., New York

THE rolling, yellow sand reflected the heat of the sun in little, shimmering waves. It reflected the sun's light blindingly throughout all its visible expanse, with the exception of one spot where lay a circular shadow. In the great steely-blue dome of the sky there were no clouds.

The shadow, although not large, was very dark and distinct. The curved, even line of its circumference was precisely drawn.

In the air was a persistent rattle of sound—a series of closely spaced explosions, ever rising in intensity.

Suddenly a small, uneven shadow detached itself from the circular one; and floated swiftly across the sand. The rattling sound increased to a tremendous booming roar, and the large shadow began to fade. At the same time, the smaller one grew steadily darker.

High above the sand, a man was falling—much too swiftly.

The surface of the sand had been shaped into hills by the prevailing winds. These long, ridge-like hills, or dunes, were convex and gradual in slope on their windward sides, but on their lee sides they were concave, and very steep.

It was near the top of one of these steep slopes that the man landed. His frail legs and body crumpled under the weight of his head; he pitched forward, and half rolled, half slid to the bottom where he came to rest more gently, the target of a small avalanche of sand.

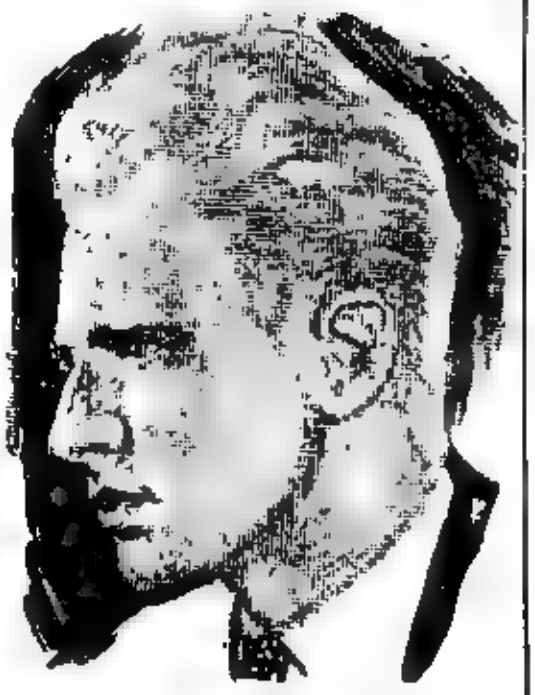
Immediately, he began to struggle; and, failing in his attempts to rise, stretched his slim arms skyward and uttered a sharp, squealing cry, painfully prolonged. Far above him a spherical object rapidly diminished in size. Fixedly he watched the sunlight glinting on its polished grey sides; watched it shrink to a tiny ball, a point, and then—nothing. He was alone.

The pressure was horrible. He buried his head in the hot sand, and clapped his ears in a vain attempt to ease the throbbing pain. They must have underestimated the weight of the Toonian atmosphere if they had expected him to live long here! It did not hurt his body, but his head was being crushed. He knew that he would soon die—and was glad. This wild, senseless punishment would be at an end.

He opened his eyes again, and stared in growing fascination and wonder at the great arched blue dome above him. Gradually the spectacle of this weirdly beautiful canopy occupied his whole attention. It was like a soft curtain of light blue material hiding the blackness of the sky and the gleaming stars;—yet the sun shone through. For a moment he forgot his loneliness, his pain, in rapt contemplation of the immense perfection above him—but only for a moment. Then the explanation came to him. That beautiful blue was the heavy atmosphere of Toon, which was slowly crushing him to death! He closed his eyes.

The heat was terrific, but not as intense as he

ALLEN GLASSER
who furnished the plot



A. ROWLEY HILLIARD
who wrote the story

MANY writers of science fiction, who have not given the matter much thought, assume that a man of intelligence from one planet would meet a cordial and sympathetic welcome on another world... It is assumed that people are everywhere educated, curious about other worlds and other cultures, and eager to help a visitor from an alien race.

Unfortunately there is no assurance that such is the case. Even were the members of another race, on another world possessed of education, there would be bound to be among them low and brutish elements. And if a stranger from another world, dazed by new conditions and unable to make his wants known, were to fall into their hands his fate might not be happy.

We have read no story that pictures with such clarity and insight the experiences of a man on another world than his own, than does this present story... With the basis of a splendid plot Mr. Hilliard has worked up a simply marvelous story.

had expected. Toon was nearer the Sun than was his own world—millions of miles nearer; yet he was not badly burnt, and this puzzled him. The explanation must again lie in the heavy atmosphere—serving as insulation, he finally decided . . . He didn't care.

He felt strangely detached. What signifies life—or death—to a tiny being separated by fifty million miles from any of its kind? Deposited on this strange planet, he had no hopes of survival; his only emotion was astonishment that he had lived a moment.

He struggled to remove the parachute that had been so inadequate in easing his fall. Movement—even the raising of an arm was serious effort. He was glued to the ground by the tremendous gravitational pull of a planet so much greater in size than his own. He relaxed.

Why struggle? With the passing of hope, all incentive to effort passes also. He felt no distress at the thought of death. Life, not death, would be freakish in this great wasteland.

And he was past anger now. What they had done to him they had done through hate and fear. Only hate and fear could conceive of so fantastic a torture for a fellow being. There was no satisfaction now in the knowledge that they had feared him; nor did he care about their hate . . . They had won. They would have their way, and all the people of the Loten would suffer in consequence . . .

Loten! A wave of sick loneliness swept over him . . . A point in the sky, obscured by a weird curtain of blue—his home!

CERTAINLY, no man had ever suffered thus! A surge of self-pity welled up within him. Certainly no being had ever been forced to long for the world—the globe which gave it birth! This horror was reserved for him alone . . .

He clenched his fists. Reason returned to rescue him from emotion. Loten did not exist for him. He was outside of the world—a tiny flame of consciousness in space. And what did that amount to, after all, he asked himself . . . What, but Death . . . ?

For a long time he lay there in the sand, quite motionless.

The sun was sinking. Its blazing heat was abating somewhat; its face was large, and red. For miles, across the surface of the sand, the shadows of the dunes were stretching out . . . And out of the sunset a tiny speck of black appeared.

Where he lay the man heard the sound of it—a steady drone, or buzz. At first it did not catch his attention, its inception was so gradual; but soon it became a roar, and he opened his eyes with a start. He had heard no sound since the departure of the space ship—had expected none. An uneasy excitement gripped him. He strained his eyes upward . . .

Suddenly, over the dune against which he lay, there shot a something, roaring thunderously. He cowered down, stunned by the terrific sound of it; but he watched it with wide eyes, as it moved across the sky.

It was T-shaped; with the cross-piece going before. Beneath it hung two wheels. It gleamed metallically.

Without attempting to rise, he howled shrilly, time after time, catching his breath in gasps—while the thing moved steadily away.

Following an undeviating line, it left him far behind, diminished to a speck, and disappeared. The sound of it lingered when he could see it no longer.

His breath came quickly, spasmodically, through parted lips; his throat was tight, and his heart pounded. The staggering surprise of what he had seen and heard left him incapable of thought. His mind was a racing turmoil of questions. His contentment, his resignation were gone—destroyed in a moment; and in their place rose a great uneasiness.

The return of Hope, to a man who has definitely put it away from him, is a joy closely akin to pain in its intensity. His whole body shook as he struggled with the sand, attempting to rise.

He had seen a machine, he knew. It could not have been an animal. It was not alive, and it was made of metal . . . A machine meant reasoning beings. There must be reasoning beings on Toon—where Loten's scientists had argued that they could not be! And machines that travelled through space! Perhaps . . .

As the new possibilities of his situation burst upon him, his homesickness returned a thousandfold; and he knew that he could rest no longer—could not wait in the sand for death. He must struggle—he must strive, until the end came—because there was a chance!

Immediately, his mind became purposeful, and he took stock of his position. He knew that the whole of Toon was not like this great stretch of sand. Thousands of years of observation of the bright planet had convinced the scientists of the Loten that it bore vegetation—and probably animal life of some sort . . .

But rational beings! His astonishment re-asserted itself. Five thousand years of systematic signalling had brought no response, and the project had lately been abandoned. Yet . . .

He shook his head, and returned to his problem. He must not waste time now.

He had food enough in his stomach to last three days at least, and he would not need water for even longer. He suddenly realized, with enormous satisfaction, that the pain in his head was considerably less than at first. Perhaps his system would be able to adjust itself to the atmospheric pressure . . .

The great question was where—and how—to go. He must go somewhere. Only motion would satisfy his craving for accomplishment of some sort. He would get no help on this great, sterile plain. He had no guarantee that another of the flying machines would come near him, and even if it did there was not much hope of attracting its attention. No, he must move . . .

He decided to follow in the direction the machine had taken. Its destination might be nearby—or it might be thousands of miles away. The probability seemed to be in favor of the former hypothesis, because the machine had

been moving so very slowly. . . . Anyway, it was a chance!

Pulling his legs up under him, he made another determined attempt to rise; and finally succeeded in standing erect. But it made his legs ache terribly; and when he tried a step he slipped, falling back with a jarring thud.

He would have to crawl.

RIDDING himself of the parachute, and with no further hesitation, he set out, crawling slowly and laboriously, keeping the sun at his back.

The heat was less oppressive now. The sun had sunk to a point where its rays were no hotter than at midday on his Loten; and he marvelled at the similarity of the two climates. He had seen none of the water vapors that astronomers described as almost constantly enveloping Toon. Toon—what he had seen of it—seemed to be as dry as the Loten, if not more so.

He climbed the long, gradual slope of a dune; and, after surveying the endless stretch of sand which met his view at the top, slid down the steep side, and crawled doggedly on.

Night was falling. The blue dome above him steadily darkened until it began to take on the appearance of his own native sky.

He was dead tired within an hour. He lay still for a time, breathing deeply—marshalling his strength. He was in excellent physical condition, but here his body was so heavy that the slightest motion was a strain. Soon, however, his eager spirit drove him onward.

At the end of another hour, happening to raise his head, he uttered an involuntary cry. Points of light glimmered in the sky . . . So he was to see the stars after all!—though only at night, it seemed. He was relieved. In the back of his mind had been the ever-growing certainty that he would not be able to keep a direct course. He rested again, and picked out certain designs that would be helpful as guides.

He wondered if one of them were Loten. They were very dim and they blinked strangely; and their arrangement was meaningless to him. He fixed upon one of them—the brightest—and imagined that it might be *his* world—where his friends were, and his enemies; where his wives grieved for him perhaps; where his children laughed and played; where he might one day return . . .

He crawled along through the sand.

It was not really dark—only twilight. He wondered if this were night on Toon. It must be. Almost directly ahead of him—just a little to the right—was a radiance close to the horizon. It puzzled him. Soon it was spreading over the sky—a pale, ghostly light. Then a bright point appeared—a line; it grew. He stared in abject wonder while a great, white disk mounted into the sky, illuminating the scene around.

He rested a while, and watched it. It was Toon's satellite. It could be nothing else. But beside it the two luminaries of his own world were as pygmies. He was still watching it, fascinated, when he resumed his journey.

CHAPTER II.

Signs of Life

ALL through the night he travelled; and into the rising sun. The noonday heat forced him to take a prolonged rest, but he fought on as soon as possible; and sunset found him crawling weakly onward. The cool of night revived him somewhat. He knew that the strain under which he labored would hasten his time of sleep, and that worried him. Even now, he was often in a semi-conscious state. Still, he could not stop.

When the sun rose again, it shone through trees; and far across the yellow sand his tired eyes saw green hills. The sight invigorated him—spurred him on to stronger efforts. Soon after midday he lay panting in the shade of trees.

The trees astonished him. They towered above him, fully five times as high as any he had ever seen. Their stems were of enormous girth—rough and hard to the touch. There seemed to be something moving in their heavy foliage, far above him, and he heard faint, sharp whistling sounds. He looked around uneasily.

The size of the trees worried him. If there were animal life, it might be proportionately large. He shuddered. The desert, although uncomfortable, had had one advantage: he had been alone there.

Still, it was not loneliness that he was seeking, he thought grimly. Obviously, he . . .

He stiffened. He had been staring abstractedly at the coarse grass which grew thickly around him. Now his eyes became focussed upon a movement there—not three feet away. The grass was waving strangely, in a peculiar, uneven line; and he caught sight of something slim and green, that was not the grass. His throat contracted painfully. The thing did not seem to move, yet it was coming nearer. Whenever he caught sight of a part of its body, it appeared stationary; yet the waving of the grass was closer, and ever closer. It was very close now . . .

Suddenly his power of locomotion returned. He rolled over backward, and scrambled along the ground to a tree. Grasping the rough trunk, he pulled himself erect; and held himself in that position, panting.

He could see the thing more plainly now. It was like a long, green whip in the grass. Its forepart was raised in the air, and terminated in a triangular head, with two bright eyes whose steady, unwinking stare made him tremble weakly. With an effort he took his eyes from the creature; and, pushing himself away from the tree, ran desperately, as far as his legs would carry him. When he fell, he continued to crawl—farther, and ever farther into the green woods.

He wondered if all creatures crawled in this world of Toon. Perhaps the great gravitational pull made erect postures impossible.

For a long time he climbed steadily, threading his way through the underbrush, skirting fallen trees. He felt increasingly drowsy. His sleep period would come soon, he knew. He

could not stave it off much longer. And when he had slept, he must eat . . .

He came to level ground. Ahead was an opening in the trees, where a wide ledge of stone was revealed. Out upon this he crawled, and gazed at the scene that opened out below. Miles of waving tree tops met his view; but what held his attention was a strip of silver cutting the green.

He felt a warm glow of satisfaction. Water, in his mind, was closely associated with organization, transportation facilities, reasoning beings . . .

Yet he must be wary. He had no idea what sort of beings they might be. This might be a canal, but it was strangely irregular in its course. At least he was making progress . . .

A peculiar, ringing sound came from the trees below. It was utterly unfamiliar to him. Nerving himself, he determined to discover what it was. He climbed down from the stone, and began the journey down the hill.

As he progressed the sound became louder, and others were added. He was puzzled by a low, intermittent muttering. It made him vaguely uneasy, and with every moment his agitation increased. The muttering was now very definitely spaced into irregular but continuous tones.

And he knew that he was listening to a conversation.

He was frightened. Now that he was so near to what he had been seeking, his courage left him; and he lay trembling, flat on the ground, awed by the booming voices of the creatures.

They must be very large, he thought, to utter such deep tones.

He had lain there for perhaps five minutes, when, suddenly, there came a rending crash; and, peering ahead, he saw the green top of a tree sway violently, sink, and disappear from sight. At the same time there came a louder cry, followed by the blending of two thunderous voices, speaking simultaneously. . . . Then a heavy thud, and another cry . . .

HE crawled cautiously forward. He reached the fallen tree. Its trunk was suspended above the ground by the projection of a number of its large braches. He peered beneath it.

Directly before him, in a small clearing, two creatures were struggling together. They stood erect upon their huge legs, using their crudely bulky arms and hands to strike and tug at each other. They were tremendous in size—fully three times human stature; yet their heads were smaller than men's. Their erect posture gave them a weirdly half-human look, which was belied by the brutal savagery of their aspects. Their brows were low; their heads were covered with long hair; and in their gaping mouths he saw rows of sharp, white fangs. Their skin, instead of being golden, was a dirty grey in color, and was covered with short curling hair or fur.

But he could see very little of their bodies, because—and this sight seemed to him the strangest of all—they were almost entirely covered with cloth. This woven material was brown in color, and shaped to hang close to their bodies, even over the arms and legs. He lay very still, watching the titanic struggle with ever growing wonder.

They appeared to be evenly matched. Once, one of them was hurled heavily to the ground, but he leaped effortlessly to his feet. Both of them grunted and uttered sharp exclamations at intervals. They tramped back and forth, tearing up the grass, crushing down the small bushes.

They must greatly hate each other, he thought —or perhaps it was natural for them to fight like this. Now one of them was tiring—the smaller. Its movements were slower, and it stepped almost constantly backward. Suddenly from its bulbous nose spurted a red stream. He shuddered. The sight of these two strangely man-like creatures beating and tearing at one another sickened him.

The larger creature was pressing its advantage, advancing upon the other with cruel, flailing blows. Suddenly the smaller one crumpled to the ground, and lay still. The other turned away. It seemed satisfied. It grasped an object which was leaning against a tree—a cutting tool apparently, consisting of an edged block of metal attached to a long handle of wood; and without a backward glance at its fallen foe, made off through the trees.

The creature on the ground was alive. He could see the rise and fall of its breathing under the cloth covering of its breast. But the bright, red blood was still running out of the nose. It had lost an astonishing amount; and he feared that, unassisted, it would soon die. He must try to help.

With wildly beating heart, he crawled under the tree trunk and out into the clearing.

As he moved through the grass, he made a slight rustling sound, which the creature heard. It turned its head, and stared directly at him. He stopped fearfully . . .

The creature uttered a loud cry, and scrambled to its feet. He raised one hand, attempting a friendly gesture; but the creature, after watching him for a moment with wide eyes, bounded swiftly away into the woods. He heard the thumping and crashing of its passage through the underbrush long after it had disappeared from sight.

His first sensation was one of immense relief. He had been desperately afraid.

Evidently the thing had been afraid of him, too. And that was surprising . . . Clearly, these could not be the reasoning things that had built the flying machine he had seen. His relief was quickly followed by disappointment. For a moment he had imagined that his first objective had been reached. Now he realized that he might be as far from it as ever. Toon was immense. Probably, now, he was in a country inhabited by inferior beings—beings that would be constantly hostile and dangerous to him. If that were so, his quest would end here, he knew. Sleep could not be warded off any longer. He could not

protect himself. Soon he must eat—and there was no food.

He crawled into the bushes; and lay down, lonely and sick. He would stay here. This was failure—and the end. But he was not sorry for having tried . . .

Above him the sky was not blue, now; but a strange, dead grey. Nowhere could he see the sun. The wind sighed mournfully in the trees.

He slept.

CHAPTER III.

In Confinement

He awakened in shivering terror. His entire body was wet. Water was falling on him. It was falling on the ground all around and on the trees—thousands, millions of drops. He choked, as he tried to breathe the damp, saturated air. Desperately he looked around for some protection, but there was none. He covered his face as best he could with his folded arms, and cried out in fear.

There came a shout; and he heard something moving toward him, but he did not care. Horror of the falling water crowded all other emotions from his mind.

One of the creatures was standing over him. He heard others approaching. They were shouting loudly back and forth to one another. In a moment, there was a circle of them, all around him.

He was too distressed to pay them any attention. After a time one of them bent down and grasped him under the armpits. He felt himself lifted into the air. He did not struggle, even when their faces were all around him—very close.

Now they were walking through the trees, one of them carrying him in its huge arms, quite gently. He was scarcely conscious of his surroundings. It was becoming more and more difficult to breathe.

Then he felt himself laid down on something soft and dry. The water was not falling on him now. He opened his eyes.

They had placed him under a shelter. He could hear the water on the black covering above him. There was one of them on each side of him, where he lay on what seemed to be a cushioned seat . . . .

Suddenly there came a rumble, and the seat beneath him quivered and shook. He struggled to sit up. One of the creatures aided him, and wrapped a dry cloth about his body. He was grateful.

The seat was bumping up and down violently. On each side, he could see the trees moving slowly backward. He realized that he was in a vehicle. It jolted constantly, and he imagined that it must run directly on the rough ground. It made a continuous and tremendous noise. But it was a machine of transportation, however crude; and he quickly forgot his bodily discomfort, as the implications of this fact crowded through his mind.

He looked with a new interest at his captors. They were talking together excitedly—evidently about him, for they never removed their eyes from him. In spite of their strangeness and savagery, they must have reasoning minds. He could be pretty sure of that, now . . . .

The vehicle came to rest, and to either side he saw structures, made, evidently, of cut trees. Then his heart leaped again, as he saw that they had glass. So they knew how to make that! There were only a few pieces of it let into the walls—but it was certainly glass, and his hopes rose a bit higher.

They carried him into one of the houses. It was quite dark. They set him down upon a large table. They were increasing rapidly in numbers, jostling in through the door and crowding around the table.

In the wall near him there was one of the pieces of glass. Abashed by the dozens of staring eyes, he looked through this, and saw a broad field, its soil turned up in long, straight rows—evidently for planting. Near the center of the field were two creatures, which immediately commanded his attention.

They were not alike. One was similar to those he had already seen, but the other was even larger and of a different shape. Four legs carried the great, bulky body, which rested in a horizontal position, as did the thick neck and long, tapering head. It was dragging the tool which turned up the furrows of soil, while the other followed behind, governing its directions.

Clearly, he thought, there were many types of creatures on Toon. He would have to try to understand their relations to one another . . . .

Inside the room there was much noise, and the air was hot, damp, and very unpleasant to breathe. He was not afraid of the creatures now; and instinctively he realized that it was curiosity that brought them here, and that they meant him no harm. A few were trying to speak to him, looking directly into his eyes and making monosyllabic sounds. This amused him at first. They would not be quite so hopeful if they understood from where he had come.

But in another moment his amusement had vanished. One of the creatures, standing near, placed a finger close to where he sat, at the same time uttering a short disyllabic sound:

"Table!"

A thrill shot through him. He had expected no such intelligence on the part of his captors. A new wave of hope surged up within him . . . Carefully, he repeated the gesture and the word.

His action was followed by a burst of excited conversation in the room. Several made sharp, guttural noises which he guessed meant gratification or amusement.

Immediately a number of them took up the game; and he eagerly did his part, repeating the sounds they made and identifying them with objects. With every possible gesture he tried to indicate to them his pleasure and gratification.

He was sorry when they began to go away.

It had been getting steadily darker for some time, when, suddenly, the room was brilliantly

illuminated; and, looking quickly around, he saw a number of bright globes. This event brought him to a high pitch of elation. The character of the vehicle in which he had ridden had made him fear that they knew nothing of electricity, but here was tangible evidence that they did. His dream of a return to Loten seemed less like a wild imagining at every moment.

He was beginning to think of these creatures as people, almost human beings.

Now, only two of them remained. From their glances he knew that they were talking about him. Finally, one of them lifted him from the table; and, walking swiftly, carried him through the door, across a short stretch of open ground, and into a smaller and darker structure, there laying him down upon a bed of cloths and cushions in one corner of the single room. The other followed them in, carrying a china dish and cup. Setting these beside him, they both pointed with their fingers to their open mouths. He understood immediately, and was glad. He needed nourishment badly.

But when he looked into the dish his pleasure abated. It contained an assortment of what appeared to be parts of plants and—he tried to conceal his horror—animal flesh.

Looking up, he nodded—a gesture that he had quickly learned; and to his great relief they turned and left the room, closing the door. He heard a sharp click.

The flesh he immediately put aside. He did not like to think what its origin might be. He studied the plants. They had evidently been subjected to a heat process, but had not been chemically refined in any way. The percentage of nourishment in them must be very low, and it would be necessary for him to eat great quantities to sustain his strength. He wondered how long his stomach could stand it.

These people must eat almost daily to sustain themselves on such fare, he reasoned, marvelling.

With a pronged implement that they had given him, he set to work to mash the food into as soft a mass as possible. This process they accomplished easily with their fangs, he knew.

The taste was anything but pleasing, and he had great difficulty in swallowing; but he finally managed to assuage his hunger, and felt better. He drank a little water from the cup, which contained enough to supply him for at least five days.

This done, he stretched himself out upon the bed, and gave himself over to pleasant reflection. A far cry, he thought, from the man lying helpless in the desert, devoid of all hope, to the one who had established contact with a race of intelligent beings who would doubtless be willing to help him return to his own native world. He reflected that if the flying ship had not happened to come near him, he would most certainly have perished by now—perished in a foreign world, far away from those he loved, never knowing there was a chance for his salvation. But now he had taken the first step . . . . Anything was possible now.

His attention returned to his surroundings. The bare room was lighted by a bulb hanging from wires in the center. From it dangled a cord, the purpose of which he quickly guessed. The walls and floor were bare wood, and rough. Along the whole length of one wall extended a low, narrow table, or bench, strewn with a miscellaneous collection of objects which aroused his curiosity.

He crawled to the bench, and pulled himself erect by grasping its edge. He was just tall enough to see along its surface. Near him rested a large roll of what he first thought was cord; but on closer examination he decided that it was metal wire covered with a fibre insulation. Obviously it was for the conduction of electricity. Scattered around it were a number of cylinders of varying sizes, which he saw were wound closely with very fine wires. Clearly, these people did more with electricity than make light, he thought, encouraged.

THERE was nothing else in the room except a pile of rusty metal in one corner. The whole place was depressingly dirty and dreary. He thought that he would feel better without the light. He made his way to the center of the room, and stretched upwards. Finding that he could just reach the cord, he jerked it; and returned in the darkness to his cot.

He lay there quietly, trying to calm his nerves. He wondered what they would do with him . . . .

He was still wondering the same thing at the end of four days. They did not move him. They did nothing except come and look at him—a great many of them at first, but less and less as time went on. They came in the daytime—never at night. They fed him; and a few still tried to talk to him. This pleased him, and he strove eagerly to understand and imitate; but they soon got tired and stopped.

He learned to distinguish the males and females among the people that came, by differences in stature, length of hair, and clothing. He observed, with complete bewilderment, that the males often carried in their hands burning cylinders which they raised regularly to their mouths, blowing out smoke into the air. He guessed, finally, that this must be some sort of sanitary precaution.

Now, however, he was left alone most of the time. They brought him food, and then went away. He was uneasy. Physically, he felt far from well. The damp air made his throat and chest ache; and he feared that the long deprivation of sunlight was hurting him. He could not understand.

Gathering his courage one day, he attempted to open the door. He reached up and turned the knob the way he had seen the people do. But it would not move when he pushed. He remembered the clicking sound he had heard every time after they went out.

He became frightened. He did not understand this confinement. Why would they not let him out?

There passed another day, of mental torture. Would they let him die in this dark, dreary place? Had all his efforts merely led to a lonely, purposeless death?

He wondered what they would do if he went out of his own accord; and finally decided that he must do it, even at the risk of offending them. Further inactivity he could not bear.

Within five minutes he had formed a plan of action. It was night—the best time to work; for he must work undisturbed for a time.

He made his way to the bench, and collected three of the wound wire coils, which he dropped to the floor. With a cutting tool that he found he managed to get a length of wire from the large roll. The tool was very heavy.

Next, he crawled to the corner, and selected a number of small pieces of metal. He rested for a while, studying the light bulb which hung in the center of the room. From the light it gave and the size of the filament, he roughly estimated the power of the current.

Then, with a graphite writing instrument that he had found, he drew a diagram on the floor. He took a very long time doing this, and labeled it carefully. When he had finished, the little window at the end of the room showed that dawn was breaking outside.

Hurriedly then, he set to work with the metal, the coils, and the wire,—twisting, winding, connecting and cross-connecting—constantly glancing at his diagram and at the window. Finally, when it was broad daylight outside, he gave a sigh of satisfaction.

He had achieved an ugly, jumbled apparatus, vaguely cylindrical in shape with a point of metal at one end. He laid it on the floor; and making his way to the bench, secured two more lengths of wire. He crawled under the bench to where the power line for the light ran down the wall, and there connected them. Then, securing his cup of water, he dipped into it the ends of his two wires, and observed them for a moment. Satisfied, he carried them to his cylindrical apparatus, and connected one of them at the end opposite the metal point. The other he did not immediately connect.

CHAPTER IV.

The Circus

HE was breathing hard now, and his face was flushed. For a long time he sat very still and listened, but he heard no sound. At last, moving very slowly, he carried his cylinder to the door. He raised it, and placed the point against the metal lock, under the knob. He pressed his lips tightly together, and set his jaw. . . . . With the end of the wire which he had not connected he touched a point on the cylinder.

There was no sound. There was no movement of the cylinder. Yet the metal lock dissolved, and daylight shot through the place where it had been. A cloud of light grey dust drifted lazily to the floor.

He disconnected the wires. Carefully he hid the thing under the cushions of his bed. Then he pushed open the door, and crawled out into the sunlight. The sun felt warm and pleasant on his back.

He heard a cry, and looked up fearfully. One of the men of Toon was running towards him carrying a dish. It was the man that brought his food.

His throat was tight, and he was trembling. He knew that this was the supreme moment. He nodded his head and smiled. He raised one hand, palm upward.

The man stopped directly in front of him, and growled—then raised an arm, pointing at the door of his prison.

He made a little murmuring sound to the man; and raising his face to the sun, smiled and nodded once more. The man pushed him backwards with one foot, always pointing at the door.

He turned, and crawled back into the shed. Dully he watched the man; who stood for a long time staring at the door where the lock had been —then strode to the pile of metal and picked up a chain.

He did not move when he felt the chain around his body. He closed his eyes, and did not open them until he heard the door shut. He did not move all that day. He only watched the little window. When, finally, the little window grew black, he drew his machine from under the cushions, and connected it again at the wall. The chain was fastened to a leg of the bench, and allowed him to do this. He destroyed a portion of the chain, and loosened it from his body. He crawled to the wall farthest from the house where the people lived. Moving the machine in a slow arc, he cut a hole in the wall. Disconnecting the wires, he used them to fasten the machine around his waist. Then he went out into the night.

He did not know where he was going—except that he was going away from these beings that held him prisoner without a reason. At first they had seemed kind—but they were kind no longer. Something had changed them, he thought; but he could not guess what . . . .

He had progressed less than a hundred yards when a sudden tumult of sound froze him with terror. It was coming at him through the dark, a hoarse, senseless, animal cry. And bounding toward him he saw the dark shadow of a beast. He knew instinctively that here was an unreasoning creature—and all the strength went out of him. He lay flat and limp on his face. Now he heard its panting breath, and felt the heat of it on his body . . . .

At the same time, but only semi-consciously, he heard the loud shouts of men. As in a dream, he felt himself grasped roughly and lifted from the ground. Soon he knew that he was back in the shed again. He saw a man standing above him holding his machine.

He felt strangely detached—as if he were not there at all. He saw the man look at the machine; look at the door; look at the chain; look at the hole in the wall; look at the light cord. He saw the man connecting his machine to the light cord; he felt powerless to warn the man that he might be connecting it wrong—that there were two ways: one right, one wrong . . . .

An explosion threw the man heavily against

the wall. He could see the man struggling slowly up—coming towards him—kicking him. But he could hardly feel the kick at all—and everything got dark . . . .

When light came back it was just a small square above him. That puzzled him, until he reached out and found wooden walls all around him—very close. He was in a box. He became suddenly fully conscious of the fact. Looking down at him from above he saw the faces of two of the men of Toon.

He cried out involuntarily, struggling to escape. One of the creatures shook a heavy piece of metal threateningly over his head. He cowered down, shuddering, at sight of the merciless gleam in its eyes. The light was blotted out, as they placed a cover over him; and he was deafened by a long and thunderous pounding.

Then began a time of horror in the darkness. His active mind had nothing to feed upon but fear. Only too clearly was it brought to him that he did not know the ways of these creatures of Toon. What was deadly fear to him might be commonplace to them. He had hoped to find them friendly, merciful—yet friendship and mercy were qualities of his own experience in a world different from theirs. Why had he thought to find them here?

HE had no measure of time. For endless hours he lay there in the dark, bracing himself against the sides to protect his head and body as much as possible; for the box seemed almost constantly in motion—jolting, tilting, and bumping until he was weak and breathless from the strain.

His mind, worn out by its relentless self-torture, sank at last to semi-consciousness.

Suddenly light returned, and he was dragged roughly from his prison. He was in a large room where the combination of odor, heat, and noise was overpowering. Great numbers of the men of Toon were there, hurrying in all directions, seemingly very busy. He noted immediately that their clothing was different from that which he had seen, and wondered what the significance of that might be. . . . . He felt strangely calm, now.

Before him was an immense, bulky man, who stood with legs apart and arms folded, staring at him with wide, unwinking eyes. This man had a face that was light red in color and rounded, almost swollen-looking in shape. He nodded, and his cheeks shook loosely. He nodded several times, and seemed very pleased. He spoke sharply; and others, standing around, sprang into action.

They brought a red cloth, and tied it around the captive's loins. They forced him to crawl back and forth on the floor, while the big man looked on, nodding and chuckling. Then the big man ran hot, cushion-like hands over his head and body; pried open his mouth; grasped his hand and shook it vigorously up and down; and, with a final nod, turned and walked away.

He understood none of this, and was very unhappy.

They placed him upon a high, draped platform, where there was a small chair and nothing else. There were a number of similar platforms in the room.

It was impossible for him to maintain his previous indifference to his surroundings. Around the walls of the room were long rows of barred enclosures, containing creatures of every conceivable size, shape, and color. Some were hideous; some were strangely beautiful; all were absorbingly interesting. For a time, he forgot everything else while he watched them and listened to the sounds that they made. Certainly, he thought, a scientist of the Loten would give twenty years of his life for the opportunity to see these creatures! Some of them were amazingly like reconstructions that had been made from fossilized bones found on the Loten.

They brought him food, which he judged must be the cooked seeds of grain. It was soft, and he forced himself to eat a little, although he was not hungry. He feared that he would have to learn to eat daily, for food concentrates seemed to be unknown here.

His mind was occupied trying to understand the meaning of this place. Great numbers of people were crowding into the room, now. Rows of them stood around his platform.

The other platforms were now occupied also. On them were beings resembling the people around them, but each one differing in some strange way from the normal. Some were enormously large, some small. And he saw one which was shaped like the men of Toon, yet was no taller than himself.

An endless stream of people surged through the room, circulating around the platforms and cages—gazing fixedly at their occupants.

He began to understand. These were exhibits—creatures strange to the crowds who came to look at them. Toon was very large; and transportation methods were poorly developed. Perhaps, therefore, these people had never seen many of the parts of their own globe.

Their staring eyes made him uncomfortable. Wherever he looked they were—staring eyes and gaping mouths. He felt suddenly ashamed. He wanted to hide himself—but they would not let him do that, he knew. How long would they keep him here, he wondered? There seemed to be no limit to the crowds. This must be a great center of population . . .

And in a flash he had forgotten the people, with their staring eyes, forgotten his shame, forgotten his bodily discomfort . . . A center of population! Those words blazed in his mind. Once more, he knew the joy of hope.

With a sudden clear perception he realized that they could not have helped him more if they had done it consciously. He had arrived at a goal, which, a few days ago, had seemed impossible of attainment. Here, if anywhere, he would find help . . .

He must learn the language. That was imperative . . . And again his good fortune amazed him. These people were constantly talking. His position was ideal for studying their speech. From what he already knew, it was

quite simple; and it should not take long to learn enough to serve his purpose.

IT took longer than he had expected, mainly because the people were not there all of the time. They came only at certain periods of the day; and he soon made a surprising discovery—that they slept during a great part of every night. In fact, almost one third of their time seemed to be spent in an unconscious state. The creatures in the cages slept even more. He could see no signs of intelligence in these caged creatures. They were dumb, and were completely dominated by the men.

He missed the sun badly. These people, in their dark houses and their draped bodies, did not seem to need it. Often he felt quite ill, but tried not to worry about his health.

At night, when alone, he practiced the sounds he had learned; and rehearsed the things he was going to say when his chance came.

He passed through a sleep period; and then, on the ninth day, decided that he was ready. To the attendant who brought his food he said:

"I talk."

The man started violently, and gaped at him.

"Talk?" he repeated blankly.

"Yes!"

The attendant looked at him uncertainly for a long time, and then walked slowly away.

He was disappointed. But he was not kept waiting long. Soon the man returned, accompanied by another.

"Blumberg wants to see you," they said. He did not understand that, and shook his head. However, they lifted him from his platform, and carried him out of the room. They took him up a long series of steps and through dark corridors, into a small room.

Here it was cool and light. In the center was a desk, and behind it sat the large man he had seen once before.

"Set him on the desk here," ordered the large man. "Now, little feller—they tell me you're talking!"

"I talk."

"Well, well, well!" said the large man jovially. "What'll we talk about? . . . I'm Blumberg, and I run this circus . . . Who are you?"

He understood only the last words, but they were what he was waiting for.

"I am man of Loten," he said carefully. "Loten is world more far from heat star."

"What? Say that again!"

"I not live in your world—in this world . . ."

"The hell you don't."

Again he did not understand what the large man meant, and looked around helplessly. Then he saw a writing instrument on the desk, and picked it up. Blumberg pushed forward a piece of white paper. Quickly he drew, in its center, a large circle with lines extending from its circumference to indicate radiation. Outside it he drew four small circles at varying distances from the central one.

"Hey, Edgar—come here!" called Blumberg.

A pale young man who had been sitting in a corner approached the desk, saying, "Yes?"

He looked pleadingly at the pale young man. He placed his fingertip on the large circle, and said, "Heat star!"

"Sun," said the young man quickly.

"Sun!" he repeated gratefully. Next he indicated the third little circle from the center. "This world?" he said.

"Earth," said the young man.

"Earth? This world is Earth?"

"Yes."

Blumberg grumbled: "What is this—a joke?"

He could not understand Blumberg. Eagerly he looked into the face of the pale young man, and indicated the fourth little circle.

"Mars," said Edgar.

"Mars!" he cried jubilantly. He pointed his finger at himself. "I am man of Mars," he said.

There was silence in the room, while they both stared at him. Then the big man began to laugh. His body shook, and his red cheeks jumped up and down.

"So you are a Martian—eh?"

"Yes—a Martian."

Blumberg was still laughing. "That oughta go big in the show—huh, Edgar?" he said.

"Yes, sir," said the young man.

"If you live on Mars, what're you doing here?"

The Martian had been expecting this question.

"They send me away to Earth."

"Why did they send you away to Earth?"

CHAPTER V.

Blumberg Promises

THE Martian began to speak slowly, carefully. Through long days and nights he had rehearsed his story, knowing he would have to tell it. The pale young man helped him often, at points where he lacked words . . .

He told of the scarcity of water on Mars—of how there was only a little, that had to be preserved carefully.

Here Blumberg interrupted. "How much water has this chap been drinking?"

"Less than a cup, sir—in almost ten days," said Edgar. "The attendant was telling me . ."

Blumberg grunted. "Go on!" he said.

He told of the social order of Mars—of the three great classes: the Aristocrats, the Scientists, and the Workers. The Aristocrats, he explained, were the rulers, who utilized the knowledge of the Scientists and the energy of the Workers to build up a State for themselves.

He told how, once a year, the water rushed down the canals from the melting polar ice caps, spreading vegetation over the face of the planet, and of how quickly this precious water disappeared, evaporated by the ever-shining sun, until there was none left for the thirsty plants, and they died. Thus, every year the famine was worse on Mars, and more Workers died.

He told how he, and other Scientists, had wanted to spread oil on the canals to stop evaporation, and of how the Aristocrats had forbidden them to do it.

He told of the plan he had conceived to control the waters at the head of the canals when

the ice melted in the spring, so as to force the Aristocrats to come to terms.

And finally, he told of their premature discovery of his plan; of their great anger and fear; of their determination to punish him as no man had ever been punished before; of his banishment from the very world in which he lived.

There was a long silence when he had finished. At last Blumberg coughed, and shook himself.

"That's a fine story," he grumbled, "but you left somethin' out . . . What I wanta know is: how did you get *here?*"

"In a space traveller," said the Martian.

"What's that?"

Carefully, laboriously, he described the space ship. With the pencil he sketched diagram after diagram, while the pale young man helped him and labeled them as he directed. The young man was becoming visibly excited. When the Martian had finished, he burst out:

"By god, it would—it *would* do it! . . . Look—"

"Shut up!" said Blumberg. The perspiration was standing out in large beads on his forehead.

"Fellow," he said heavily, "if you're lying, you've got one hell of an imagination!"

"You not have space travellers?" asked the Martian tensely.

"No . . Just ships that travel in air," answered the pale young man. He heard the other's painful catch of breath, and continued quickly: "But with these diagrams it would be easy to—"

"Shut up, Edgar . . . Shut up—an' get outta here!" barked the big man. The other turned, and left the room without a word.

"Now, look here, fellow," said Blumberg, "I'm goin' to take your word for it. I'm probably crazy to believe you; but I've seen most of the funny critters of this world in my time, an' I ain't ever seen one like you. So you may come from Mars, for all I know."

The other looked at him eagerly, trying to understand his words. "You think I am man of Lo— of Mars?"

"Yes—that's right."

The Martian quivered with excitement. He held out his arms in a gesture of appeal.

"You help me . . .?"

"Yes."

"You help me go to Mars?"

Blumberg looked down at the desktop, and was silent.

"Yes. I'll help you," said Blumberg suddenly. He stood up, and patted the other softly on the head . . . "Sure . . . you bet!"

THE Martian lay upon his back on a leather couch in a small room where they had taken him. His eyes were wide and shining. His hands clenched and opened convulsively. It seemed to him that he had been waiting for days.

The door opened, and Blumberg entered, followed by a smaller man. As the Martian struggled to his knees to greet him, he spoke heartily.

"Hello there! Think I wasn't comin'? No use being in too much of a hurry, y'know . . . Meet Dr. Smith. He's a scientist like you . . ."

The Martian nodded and smiled at them happily. Dr. Smith looked at him long and curiously, meanwhile automatically seating himself in a chair close to the couch. Blumberg, who was pacing the room, cleared his throat.

"Now, look here," he said, "I'm willing to help you, but you've got to help me do it . . .—"

The Martian understood him immediately.

"Yes!" he replied quickly. "Yes."

"Good! . . . Now, Dr. Smith is going to ask you questions about things we need to know. You tell him all you can."

"Yes . . . I tell him!"

Dr. Smith had many questions to ask, on many and diverse subjects. At first, communication between the two was very difficult; but both were highly intelligent and understanding men, and before long they became fairly successful in exchanging ideas. Blumberg paced constantly about the room. Occasionally he went out, but always returned quickly.

The catechism went on for hours; and ended only to be resumed early the next day.

And so it continued on the following day, and on the day after. The Martian was puzzled. They seemed to want to know so many things! Dr. Smith had questioned him on every subject—mechanics, electricity, magnetism, chemistry, colloids, catalysts, transmutation of metals—everything. He feared that they were wasting time, but did not think it proper to object when they were going to so much trouble on his account. Nevertheless, he could not help worrying; and that night, when the pale young man brought him his food, he asked timidly:

"Do they make the ship . . . ?"

The pale young man looked at the floor, biting his lips. Then he went to the door, opened it, and looked out into the hall. He closed the door softly, and came near the couch. He looked straight into the Martian's eyes.

"There is no ship!"

"No ship?"

"No." The young man was flushed and angry. He spoke very fast: "That fat crook is not helping you . . . But you are helping him—you bet . . .!"

"Does—does he not think—think I am the Martian . . . ?"

"Oh, he thinks you're a Martian, all right! He knows you are. He's taking out patents already."

The other shook his head uncomprehendingly.

"Don't you see it? Where you come from they know things that they never even imagined here. You got knowledge in your head worth millions of dollars; I mean, you have facts which are of great value to Blumberg. Why, already you've told him to make gold out of lead—something very precious from something worthless. And a hundred other things besides.

"He does not care about you; he cares about your knowledge . . . Do you see?"

"Yes."

The young man's anger suddenly abated, and he glanced fearfully at the door.

"I'm sorry," he said gruffly, "but somebody had to tell you. You won't get any help here!"

He turned, and almost ran from the room.

THE Martian sat perfectly still for a long time. Then he climbed down from the couch, and crawled to the door. He reached up and grasped the knob. The young man had left it unlocked, and in a moment he was in the dim hallway. He crawled along, keeping close to the wall, until he came to the top of a stairway. He felt the cool night air on his face. Very slowly he lowered himself down the steps. He came to a wide door leading out into the open.

Seated in a chair by this doorway was a man, whistling. The Martian waited patiently in the shadows until the man stood up, yawned, and strolled away.

Outside, there were high, dark buildings all around him. He found himself in a narrow canyon running between them. He crawled down this canyon to the right, close against the buildings. The paving beneath him was hard, and hurt his knees. But he did not stop.

Someone was walking towards him. He could not escape being seen. He was near a large light on a pole. He raised his hand in a gesture of greeting . . .

It was a woman. Suddenly she saw him, and gasped. Then she screamed—piercingly. The sound echoed and re-echoed between the high walls of the buildings.

Windows and doors banged. Footsteps pounded on the pavement. Soon there were many people around him. Some of them were holding the woman. She hung limply in their arms.

A man strode into the group, swinging a club, and speaking authoritatively:

"Here! What's the trouble? Move on there!" He glanced at the woman. "Fainted? Take her to a drug store, somebody. She'll be all right . . . What's this?" He grasped the Martian by the arm, and raised him to the light . . . "Well, I'm damned!"

Followed by the curious crowd, he half carried, half dragged his captive along the street, around a corner, and through a lighted doorway. He slammed the door shut.

"Found a freak, Yer Honor . . . Scared a woman half to death!" It musta got outa the 'Garden'; I found it on Forty-ninth Street . . . "

The man seated behind the high desk nodded, and picked up a telephone. Into this he spoke in a low voice, waited, and then spoke again. Finally he laid it down, and said, "He is coming over. Hold on to it." He resumed his writing.

The Martian watched the man writing on the high desk. He thought that this man must be some person of authority—some ruler of the people, perhaps. After long and painful uncertainty, he nerved himself to speak:

"Please help me . . . "

The man behind the desk looked up and smiled. "Yes. That is what we are here for . . . Only be patient," he said, and returned to his writing.

The Martian remained quiet. He would not dare disturb the man again, but he kept watching him . . .

"Good morning, Your Honor!"

At the sound of the voice, he gave a start of surprise and fear. Blumberg walked towards him, smiling. He struggled, and averted his eyes. But his captor held him tightly. Blumberg patted him on the head with his large, soft hand. He trembled.

"One of yours?" said the man behind the high desk. "What is the trouble with him? He seems distressed."

Blumberg smiled at the other, and tapped his own head three times with his fingertip. The other raised his eyebrows.

"Tell the Judge about yourself," said Blumberg softly. "He is a great man, and he can help you."

The Martian was surprised that Blumberg would allow him to speak. He made a desperate effort:

"I am a native of Mars. Please, I must return home. Please help me . . . I—"

"See!" said Blumberg. He was laughing.

The Judge nodded. "Can you handle him?" he asked.

"Sure! They get along better with me than in—other places. I know how to treat 'em; and they make a good living."

"All right," said the Judge. "Take him along. But don't let me catch him running around the streets again, or you might rate a fine."

"Don't worry! We're going on the road in a couple of days now. You won't see him again . . . Well, good morning to you!"

"Good morning!" said the Judge.

The Martian lay, face down, on the leather couch. Over him stood Blumberg, breathing hard. With a light cane that he carried he struck the Martian sharply on his frail back.

"Don't try it again, or you'll get more of that!" he said softly.

The Martian did not move or utter a sound until he heard the door slam. Then he made his way to the table; and, grasping the edge, pulled himself erect. There was something on the table that he wanted . . .

The door opened softly, and the pale young man came in.

"You should not have tried it," he whispered.

The Martian pointed to the window. Over the top of a building lower than its neighbors a small, square patch of sky was visible, and in this patch a few stars twinkled faintly.

"Is Mars there?" he asked.

The young man was silent for a moment, looking at the floor and biting his lips. Then:

"Yes," he said. "As it happens, it is. Mars is the brightest of those stars, and the topmost."

"Thank you," said the Martian. "You have been very kind to me!"

The pale young man looked at him, and at the table. Then he turned, without a word, and left the room.

The Martian did not take his eyes from the little point of light. But one of his hands reached over the table, and grasped a knife which lay there. His eyes still on Loten—his home, he plunged the knife into his heart. And the little point of light, while he fixedly watched it, flickered—and died.

THE END.

Do You Want Science Fiction Movies?

We address this question to all lovers of science fiction.

Motion picture companies are asking this question, too. But despite the success of science fiction in this country, and the rapidly growing reading public, the number of science fiction movies that have appeared in America have been pitifully few.

"Metropolis" and "By Rocket To The Moon" were German films; only "Just Imagine" which was after all a humorous rather than a realistic film, "The Mysterious Island" and one or two others have been filmed in America.

Now comes news that Universal is filming "Frankenstein," and "the Invisible Man" of H. G. Wells; and that R-K-O has a film resembling the "Mysterious Island." But these few films are mere crumbs thrown to the hungry lover of science fiction. And even the millions who do not read science fiction, who are lovers of adventure, and exploration in new places and times, are becoming tired of the monotony of sex, gangster and war pictures.

Do You want Science Fiction Movies?

If you do, you have but to make yourself heard. Many of our readers are writing to film companies to make their desires known. BUT THAT IS NOT ENOUGH! Film companies are guided by the wishes of thousands and tens of thousands, not by a few letters here and there.

Wonder Stories and Wonder Stories Quarterly Will Make Your Demands Count

We are organizing a gigantic petition signed by all those who want science fiction movies and will present this petition to the large motion picture companies. IT IS UP TO YOU as lovers of science fiction to make this a success.

Get Five Signatures to This Petition

and return them to us at once. We will gather them together and *show the motion picture companies the enormous demand for science fiction movies.*

Sign this petition yourself, get four other signatures of your friends and relatives and return them to us. We will do the rest!

If you wish additional petition blanks write to us for them immediately.

EDITOR, WONDER STORIES QUARTERLY,
98 Park Place,
New York.

We the undersigned, herewith add our voices to the great demand of lovers of science fiction, for the production of a reasonable number of Science Fiction Movies in America. If such pictures are produced, we will support them loyally and urge our friends to do likewise.

(Name—Please write plainly) (Address)

(Name) (Address)

(Name) (Address)

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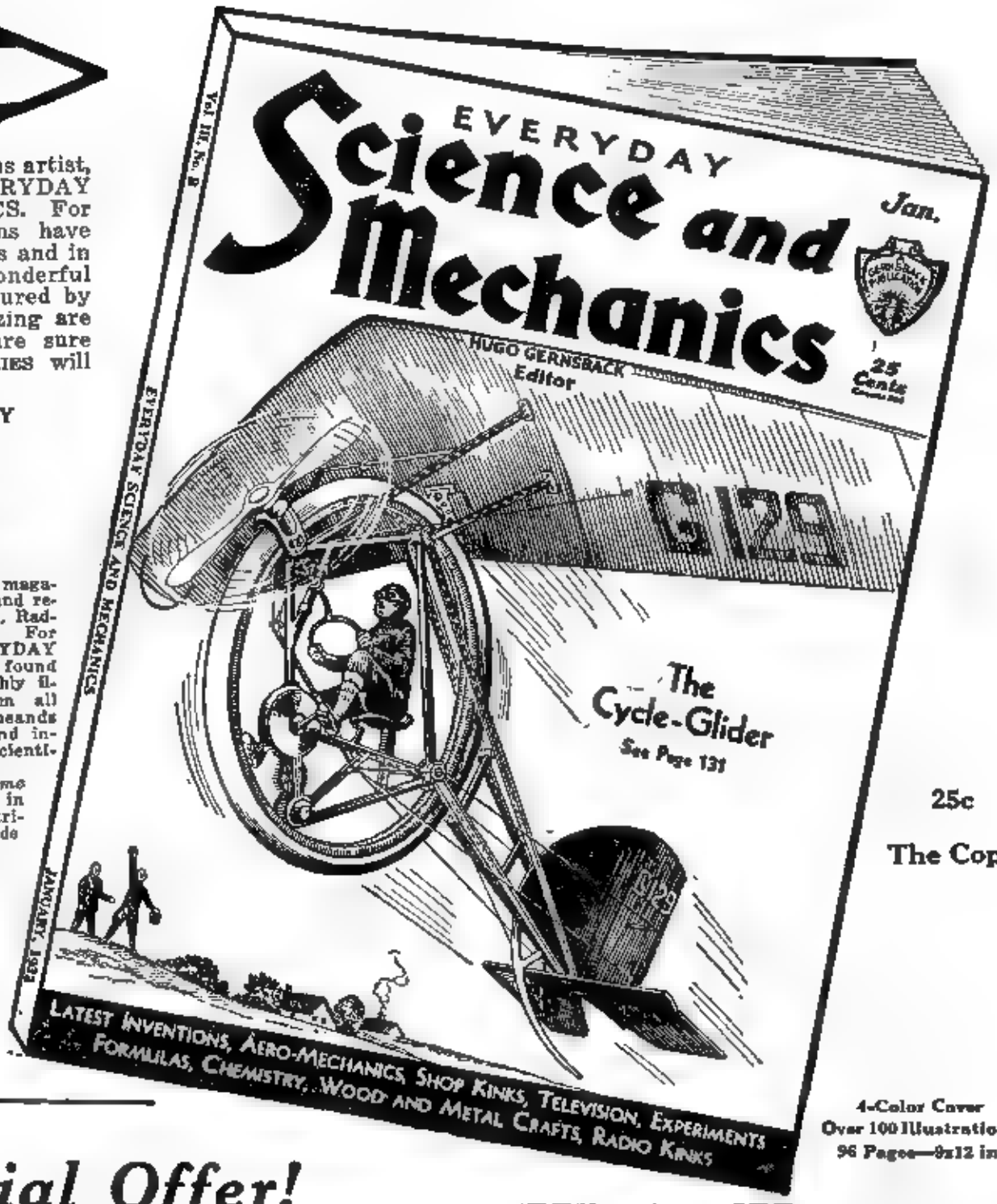

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The Reader Speaks

In WONDER STORIES QUARTERLY only letters that refer to stories published in the QUARTERLY will be printed.

Would Cheat Destiny

Editor, Wonder Stories Quarterly:

The story, "The Machine of Destiny" by U. G. Mihalakis aroused a great deal of interest among friends of mine, all readers of science fiction. The connection is indirect but nevertheless a perplexing thought.

In his story, Mr. Mihalakis gives the impression that "destiny" is a dauntless thing. Perhaps it may be, looking at it from one angle; you cannot change the time of your death. Would it not be possible though to cheat destiny? As an example; you are perhaps destined to die at 2:00 p. m. July 1. Two or three days before this time you travel by a time vehicle to a distant point in the past and fate is thwarted. Truly you would become immortal.

But if you went into future time instead, would you not die just as you passed the point of time at which your demise was decreed? Because of the reasons in the above statement, I believe traveling into future time to be impossible. Am I right?

Louis C. Smith,
1908 98th Ave.,
Oakland, Calif.

(Mr. Smith assumes that time travel may be impossible because the idea of it leads to inconsistencies and absurdities. But perhaps our primary reasoning is wrong. Scientists believed that many theories were absurd because when analyzed they were found to be contrary to the Law of Conservation of Energy. But now it is being discovered that the Law of Conservation of Energy may not always operate. So it may be with some of the queer tricks that time travel would play.—*Editor*)

From Nature's Sketchbook

Editor, Wonder Stories Quarterly:

Have just purchased your latest WONDER STORIES QUARTERLY. I wish to give you my opinion on the story entitled, "Zina the Killer." Being ever interested in your magazine of the future, and its daring and interesting strain, I cannot do anything but wish you a great success to your publication. I am happy to say that I am a regular reader to all your magazines. Being something of a free-lance writer myself I'll say that the story printed called "Zina the Killer" was very good, "a good drawing from nature's sketch book" as you say in your magazine. But the story does not belong in the same magazine.

George Marin, Jr.,
c-o A. H. Renshaw,
Newton, Conn.

(Although not an interplanetary story, naturally, we believed "Zina" to be a little filler that would be something different from the regular diet. As a matter of fact, we had two pages open, and as yet have found no interplanetary story that could fit into 2,000 words. On the whole the readers liked the little "sketch."—*Editor*)

They Run to Tragedy

Editor, Wonder Stories Quarterly:

I have just concluded the last story in the fall issue of the QUARTERLY and have a few comments to make.

"The Cosmic Cloud" deals with a realistic problem which the world may well have faced in the past and may face again in the future. The story falls short of offering a solution to the problem, and would well deserve a sequel for that purpose. Being German myself I suppose I should appreciate the German type of story, but it seems to me that German science fiction authors rather run to tragedy. First the "Shot into Infinity" ended in death for the heroine; next its sequel, "The Stone from the Moon," with its insanity of the South American heroine; and now Mr. Burgel ruthlessly slaughters his characters wholesale with cosmic forces and disappointment in love (or should the latter be included in cosmic forces?). It is to be presumed that the author chose the lesser of two evils and sent his hero to his death rather than allow him to forget his promises to Miss Hawthorn in the arms of the daughter of the Nile.

Neil R. Jones is to be complimented on his "Asteroid of Death." The action in this story would, in the hands of some authors, be spread over twice as much space without adding to its narrative value.

"The Man-Beast of Toree" has just enough philosophy in it to save it from being merely another "biological horror" story—of which there are legion.

"The Derelict of Space" is a splendid proof of the value of the Interplanetary Plot Contest. This contest deserves to be continued. It gets the man with the idea but without the words to express it into partnership with experienced authors who doubtless are cudgeling their brains for plots. This will enrich science fiction literature.

"The Planet Entity" is almost biblical. Thousands of interplanetary "arks" save the faithful from the "flood" of destruction which dooms a world full of unbelievers who would not heed the words of "Noah" Gaillard.

"The Struggle for Pallas" is not as good as "Vandals of the Void," chiefly because it is shorter. It is scarcely fair to compare short stories with the long.

L. E. Foltz, M. D.
Brownsburg, Ind.

(Dr. Foltz mentions an interesting point, in showing that German authors, even of science fiction, tend to run to tragic endings for their stories. We in America, saturated with happy-ending moving pictures, cannot seem to get away from the conquering hero always embracing the heroine, after his great exploit, in the final fadeout. It is possibly true that the Germans are often too tragic, just as the Americans are too optimistic about the way events turn out. We do caution our writers to be realistic; and if the odds against the hero are so enormous that he cannot possibly conquer them, then the story should be honest about it.—*Editor*)

(Continued on page 286)

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THE READER SPEAKS

(Continued from page 285)

Would Find the Earth Under Them

Editor, Wonder Stories Quarterly:

In the "Derelict of Space" by W. Thurmond and Ray Cummings there seems to be an obvious fallacy. The ship of doom is supposed to travel to the place where the earth and solar system will be fifty years hence. But if they have really travelled through time fifty years, they would find the earth under them, because the earth together with the solar system would have moved to occupy the position where the ship of doom is fifty years in the future.

It would seem therefore to the travelers as though they are in exactly the same position on earth. The only means by which the ship of doom could reach a point in space ahead of the earth which would take the earth fifty years to reach would be by traveling through *space*. If, as in the story, it took only a week for the ship of doom to reach a point in space which the earth would reach in fifty years, it would have to travel about 3½ times the speed of light. The story was good in spite of this criticism.

I believe that "The Planet Entity" by E. M. Johnston and C. A. Smith had a better plot and should have received first prize. The magazine on the whole was very good with excellent stories.

Jack Cypin,
1271 Hoe Ave.,
Bronx, N. Y.

(Mr. Cypin does pose an interesting objection to "Derelicts of Space" and we would like to invite further controversy on this. We welcome the controversy, for it seems to us, that WONDER STORIES and WONDER STORIES QUARTERLY are building up a body of readers who are becoming experts on the time traveling question.—*Editor)*

A Sexual Dream

Editor, Wonder Stories Quarterly:

You are not correct in your reply to H. M. Wallace of Detroit when in answer to his criticism of "The Scarlet Planet" you say, "the author was not elaborating on his own feelings, when he intruded the sexual element . . . the spokesman of the author would seem to be the corporal . . ." etc.

All students of neurasthenia can easily see the revelation of a super-sexual mind in this story. The traits are common and mental turnings far from unusual. It is quite common for such super-sensual complexes to be held by victims who are physically not at all sexually abnormally competent.

But always the mind expresses itself in the same way. Always it is the slave of the subconscious, and the subconscious is not original. There is always the same endless amorous adventures all just thwarted at the last moment—as when the girls proved to be vampiros, or the one who wasn't a vampire was encased in a crystal sphere. This is the same as our dreams when a desirable object is pursued and suddenly changes its form; or the supposed privacy is invaded by the sudden appearance of others.

Another common trait of the subconscious is to attempt to justify all such sexual extravagances or else to present a counteracting influence such as friend corporal.

Mr. Wallace, if somewhat crude, was fundamentally right. The "Scarlet Planet" was the presentation in print of what is commonly known as a sex dream.

Vic Filmer,
5 Wheatlands Road,
S. W. 17, London, Eng.

(In questions of physical fact, there should be little dispute as to who is right, a proof should be possible. But in the question at issue, where an attempt is made to probe a writer's motives, the answer is a matter of opinion; and Mr. Filmer is entitled to his. His exposition is quite interesting. No doubt quite a number of our authors write of adventures in order to satisfy subconscious longings of their own. But the science of psychology is still too young to give definite and ironclad answers to just what has taken place in the author's mind.—*Editor)*

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912.

Of Wonder Stories Quarterly published 4 times a year at 404 No. Wesley Ave., Mt. Morris, Ill., for September 1, 1931.

State of New York } ss.
County of Bronx }

Before me a Notary Public in and for the State and county aforesaid, personally appeared Irving S. Manheimer, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the Wonder Stories Quarterly, and that the following is, to the best of his knowledge and belief a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411 Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are: Publisher, Stellar Publishing Corp., 404 No. Wesley Ave., Mt. Morris, Ill.; Editor, Hugo Gernsback, 96 Park Place, New York; Managing Editor, David Lasser, 96 Park Place, New York; Business Manager, Irving S. Manheimer, 96 Park Place, New York.

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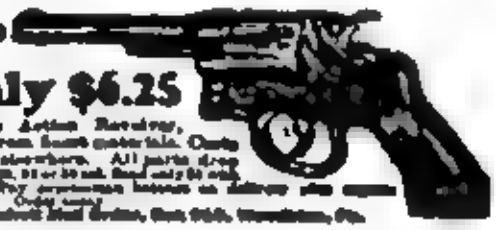

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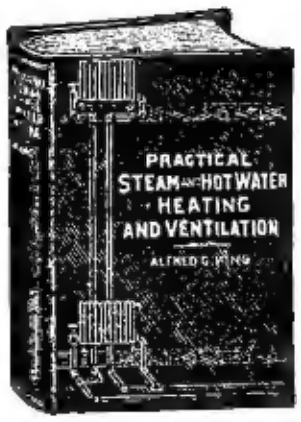

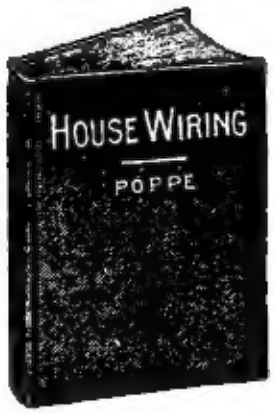

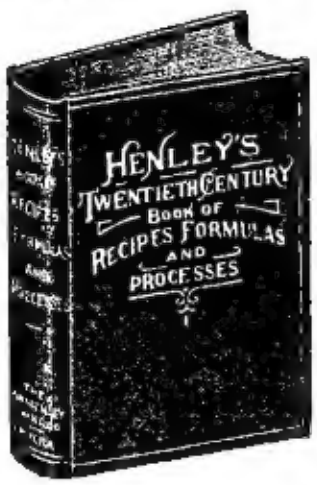

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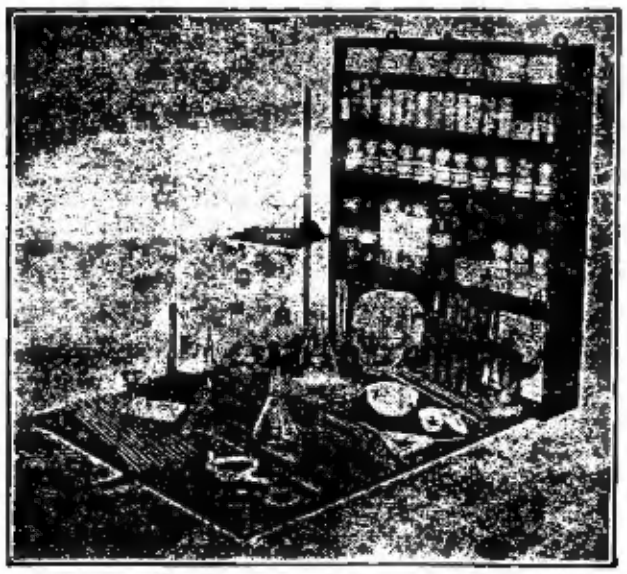

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